MacWEEK

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Low-cost color scanners *See Page 33*

Upgrading: Is it worth it? *See Page 26*

RasterOps' ColorBoard 364 uses patent-pending technology. The board displays live video while other software is running. In this image, the return of the triumphant San Francisco 49ers shares the screen with an Excel spreadsheet.

RasterOps cuts multimedia costs

By Connie Guglielmo and John Battelle

Santa Clara, Calif. — RasterOps Corp. last week broke new ground in the desktop color market with a pair of video products that take color performance to a new high and price to a new low.

The new ColorBoard 364 offers real-time, 24-bit color video capture and display for less than $1,995, while the ColorBoard 208 provides eight-bit color capabilities for $495.

The ColorBoard 364, due in March at an introductory price of less than $1,500, captures 24-bit color video from any video source. Full-motion video (30 frames per second) can be displayed in resizable windows — up to full screen, or 640 by 480 pixels — on Apple's 13-inch color monitor or compatibles.

Incorporating patent-pending technology, the board can display live video while running a software application; MultiFinder is not necessary since the video shares the same memory as the application,

See RasterOps, Page 9

Claris buying SQL access

Exec Query Tool fronts host data

By John Battelle

Santa Clara, Calif. — Continuing its high-tech spending spree, Claris Corp. this week will announce the acquisition of database access technology from Los Gatos, Calif.-based Red Brick Systems, formerly known as Applications Design Inc, or ADI.

While officials from both companies refused to disclose the terms of the agreement, sources close to the deal said Claris will purchase the core technology behind Red Brick's Executive Query Tool, an interface tool that provides an easy-to-use front end for most SQL databases.

Claris earlier this year acquired core technology behind Informix Corp.'s Wingz spreadsheet, including HyperScript, a HyperTalk-like

See Claris, Page 9

'Diesel' Mike made steady climb to COO

NEWS MAKER

By Connie Guglielmo

Cupertino, Calif. — Michael Spindler's rallying cry might well be, "Yesterday Europe; tomorrow the world."

The 47-year-old West German, who last week became second-in-command at Apple after sliding into the re-created position of chief operating officer, is credited with building Apple Europe into a $1.2 billion enterprise and one of the company's fastest growing divisions.

His success has the company — and industry analysts — hoping that he can help Apple overcome its recent slump by translating his sales and marketing tactics for Europe into a winning strategy worldwide (see related story, this page).

"Spindler brings operational strength, strategic excellence and international acumen to the new COO position," said Apple CEO John Sculley in a prepared statement released last week. "These skills are aligned with the challenges Apple

See Spindler, Page 8

Apple execs set new directions

On deck: Low-cost Mac, more support

By Dan Ruby

Cupertino, Calif. — After weeks of turmoil in Apple's executive suite, the company's realigned management team acknowledged past errors and hinted at future directions at a mass meeting of employees and at the annual stockholders meeting, both held here last week.

The highlights:

▶ Apple is committed to producing low-cost versions of the Mac, according to Jean-Louis Gassée, Apple Products president. CEO John Sculley acknowledged that the company is late in bringing such products to market. "It is not a matter of engineers working harder. Decisions have to be made faster," he said.

See Annual meeting, Page 8

CHUCK NACKEL/PICTURE GROUP

New Apple Chief Operating Officer Mike Spindler, left, joined John Sculley in an impromptu press conference before Apple's annual stockholders' meeting last week.

Executive shake-up

- Apple Europe President Michael H. Spindler promoted to chief operating officer
- Apple USA President Allan Z. Loren resigns
- Jean-Louis Gassée's Apple Products unit loses marketing and manufacturing functions, which now report to chief operating officer
- Key vacancies remain for presidents of Apple USA and Apple Europe

Spindler COO, Loren out

By Daniel Farber

Cupertino, Calif. — After several quarters in which Macintosh sales in the United States failed to reach predicted levels and marketing programs failed to intrigue customers, Apple USA President Allan Z. Loren resigned last week, and Michael H. Spindler was appointed to the newly created position of chief operating officer of the company.

Spindler, a 10-year Apple veteran who was most recently president of Apple Europe (see story at left), will have responsibility for the day-to-day management of Apple worldwide.

The new management structure outlined by Apple CEO John Sculley basically reverts back to the one in effect prior to the August 1988 reorganization, when the position of COO, held by Del Yocam, was eliminated and Loren was appointed to head Apple USA.

The appointment elevates

See Reorganization, Page 8

LATE NEWS

SuperMac gray scale is flicker-free

Sunnyvale, Calif. — SuperMac Technology last week announced a gray-scale display system based on its Spectrum/8 Series III card and a new "flicker-free" 75-Hz monitor. The eight-bit Platinum Display system displays 1,024 by 768 pixels at 72 dpi. The full system lists at $2,998, but is available at $2,399 until Feb. 28. □

Jasmine, under new president, plans layoffs

San Francisco — In a move that could presage an effort to seek its first outside financing, Jasmine Technologies Inc. announced the promotion of Vice President and Chief Operating Officer Pat Silvagnia to the office of president. CEO Dennis Chang also said the company will launch a cost-reduction program, including some staff cuts. "We are now in a position to secure the financing we need," Chang said. □

NEWSPAPER SECOND CLASS

ColorMAX 8/24. It goes from 8 to 24 bits in $500 flat.

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VideoQuill livens up text

By Connie Guglielmo

Marlboro, Mass. — Data Translation Inc. last week introduced VideoQuill, a character-generation program that lets users have fun with fonts.

The $495 program, due in early March, contains nine outline fonts that can be resized, stretched, distorted and rotated in one-degree increments. Fonts are automatically anti-aliased to produce smooth edges when displayed on both the Mac screen and lower-resolution video monitors.

Data Translation will offer a library containing 47 additional outline fonts for $495. In addition, the program will work with Apple's forthcoming Royal fonts, according to Data Translation.

VideoQuill lets users work with 24-bit color PICT or TIFF images as either backgrounds or fills for the text. Graduated color backgrounds and color fills for text also can be created with the program.

Other features include:

▶ Kerning and leading controls.

▶ Drop shadows.

▶ Type transparency densities that can be varied from 5 percent to 100 percent.

▶ Basic drawing and layout tools.

Type can be superimposed over or filled with video images using any video board. Data Translation's own 16-bit ColorCapture board is directly supported by the program.

To save disk space, VideoQuill contains a reference function that displays a version of the VideoQuill-generated file in other documents without creating additional copies of the VideoQuill file on disk. Changes made to any related VideoQuill documents will be reflected in other documents automatically, the company said.

VideoQuill requires a Mac II series machine running Apple's 32-bit color QuickDraw, a color display and at least 2 Mbytes of RAM.

Data Translation Inc. is located at 100 Locke Drive, Marlboro, Mass. 01752; (508) 481-3700. □

VideoQuill users can use 24-bit PICT or TIFF images as backgrounds or fills for text that has been manipulated with the program.

Letraset adds Type 1 support

Paramus, N.J. — In an escalating war of features in type-effects and editing packages, Letraset said last month that it will add support for Adobe Type 1 to its LetraStudio 1.5 and FontStudio programs.

The company had announced that the programs would ship in January with support for Adobe Type 3. It decided to delay shipment, however, to incorporate Type 1 fonts as well, a Letraset representative said. LetraStudio 1.5, a $495 type-manipulation package, and FontStudio, a font-generation and editing program, are now scheduled to ship Feb. 15.

LetraStudio is going head to head with Broderbund Software Inc.'s TypeStyler 1.01, a $199.95 type-effects program that also supports Type 1 and Type 3 fonts. Broderbund, based in San Rafael, Calif., said that TypeStyler 1.01 began shipping late last month.

Letraset is located at 40 Eisenhower Drive, Paramus, N.J. 07653; (201) 845-6100. □

Developers make nVIR defenses generic

By Henry Norr

Palo Alto, Calif. — Yet another mutation of the nVIR virus was reported here last month, and the developers of leading Mac anti-virus programs responded with new versions that, they said, should protect users against the new infection and any future derivatives of nVIR.

Disinfectant 1.6, a new version of the free diagnosis and repair program, incorporates generic nVIR detection and repair code originally developed by Steve Brecher in a utility called Repair. HJC Software Inc. (now part of Microcom Inc.) of Durham, N.C., said Version 2.4 of its $99.95 Virex package, also incorporating generic nVIR diagnosis and repair capabilities, began shipping last week. And Symantec Corp. of Cupertino, Calif., said it will release this week Version 1.5 of its SAM package, giving similar capabilities to the $99.95 program. Upgrades for both commercial programs are $15 or free to recent purchasers.

AntiToxin, $99 utility from Mainstay of Agoura Hills, Calif., and the shareware VirusDetective DA already detected nVIR clones.

The new virus is known as nVIR/f after its obscene four-letter name. □

News

4 Avatar, DCA and Tri-Data release 3270 gateways

5 Emerald introduces Mac-to-midrange IBM link

6 Shiva set to roll out 9,600-bps NetModems

6 Service bureau plots Colossal PostScript images

11 **Preview:** *UltraPaint from Deneba extends the common Mac paint-program interface to give new tools and capabilities to entry-level users.*

14 Heizer updates script compiler, adds macro tools

14 Catspaw brings SPITBOL and Icon to the Mac

15 Low-cost distributed networking products enter race

17 OOP products unveiled at SCOOP-West show

19 **New Media** Steve Rosenthal
Despite serial-cable snags, ABC News InterActive's 'Martin Luther King Jr.' is an educational multimedia experience.

Opinion

22 Editorial
As Michael Spindler takes the helm as chief operating officer, users hope the company will move forward to address their concerns.

22 Letters

78 **Mac the Knife**

Organizational Mac

26 Martin Marietta's seven-step upgrade path

28 **The Mac Manager** Don Crabb
The Mac IIci has such severe hard disk problems that buyers must beware — or not buy the new machine at all.

ProductWatch

33 **Trends:** Hand-held color scanners: Not a toy!

34 **MacInTouch:** *Free schematics show you how to build your own sound digitizer; update on System 6.0.4 and Mac IIci compatibility problems.*

33 **Comparisons:** Microtek Lab Inc.'s MSF-300Z, Sharp Electronics Corp.'s JX-100 and Studiotronics Inc.'s Colorset offer low-cost color scanning

44 **Reviews:** SuperANOVA from Abacus Concepts

44 **Reviews:** Aapps' MicroTV is a fun NuBus gadget

44 **Reviews in Brief:** Address Book Plus 1.0, Dynodex 1.1, MacPhonebook 2.01

50 **Reviews:** Broderbund's sophisticated TypeStyler

55 **The Human Interface** Dennis Klatzkin
Slapping a Mac interface on a commercial network is not a cure-all for telecommunications problems.

56 The Year in Reviews: Index to 1989 reviews

BusinessWatch

75 **London calling:** *Apple's U.K. showcase is the AppleCentre, a high-tech haven for Macophiles.*

75 Key employees leave The Mac Zone

77 **MarketWEEK**
More buyers know names of leading brands, according to study.

58 Mail Order

62 Ad Showcase

64 Ad Index

65 Classified

72 Career Opportunities

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New gateways give LANs 3270 connections

By John Battelle

San Francisco — Macs are making impressive inroads into token-ring and IBM mainframe sites, if the battle between major Mac connectivity suppliers is any indication.

Avatar Corp., Digital Communications Associates Inc. and Tri-Data Systems Inc. have recently introduced gateway products that support access to multiple 3270 mainframe sessions over token-ring LANs, among others.

▶ Avatar last week announced new MacMainFrame products that can connect Macs to IBM mainframes in virtually any physical configuration, including LocalTalk, coaxial cable and token ring.

Avatar's new MacMainFrame Coax Gateway provides up to five simultaneous 3270 sessions to Mac workgroups through a dedicated gateway Mac. The $2,495 Coax Gateway is due this quarter.

Another new Avatar offering, the $1,295 SDLC (synchronous data link control) Workstation, comprises a card and software that supports direct SDLC connections with up to eight sessions. Gateway versions offering up to 64 SDLC sessions also will be available at prices ranging from $2,495 to $6,495. The SDLC products will ship in the second quarter.

The MacMainFrame Token Ring Workstation, a $1,295 combination of hardware and software that allows an SE/30 or Mac II to be a member of a token-ring network and access up to eight 3270 sessions, is scheduled for second-quarter release. Eight-, 32- and 64-session gateway versions also are expected.

Avatar also announced MacMainFrame Graphics, software that lets Mac users access and manipulate host graphics via any of the other MacMainFrame connectivity products. It will ship in the second quarter for $195 per node.

▶ DCA also rolled out a line of 3270 server gateway products last week, supplementing its line of single-user connectivity products. The new MacIrmaLAN gateways support SDLC and token ring for either 16 or 64 concurrent users, with a total of up to 128 sessions.

The hardware gateways reside on a dedicated IBM PC or PS/2 equipped with either a LocalTalk PC card or an IBM Token-Ring Card and loaded with AppleShare PC and IrmaLAN and MacIrmaTalk software.

On the client side, each Mac requires MacIrma Workstation client software and the MacIrmaTalk Startup document (INIT). The token-ring gateway works only with Mac IIs or later-model clients, while the SDLC gateway requires SE or later-model clients.

The MacIrmaLAN SDLC Gateway Server costs $4,495 for 16 users or $6,495 for 64 users. The MacIrmaLAN 802.2 (token-ring) Gateway Server costs $3,995 for 16 users and $5,995 for 64 users. The products are scheduled to be released in late spring.

▶ Tri-Data Systems last month shipped token-ring and Ethernet adapters for its Netway 2000 line of dedicated 3270 gateways. Both new interfaces come in the form of expansion cards that fit into the Netway's onboard VME bus. Since the Netway has two slots, both cards can be installed into one gateway. The Netway, which is built around a 10-mips SPARC RISC (reduced instruction set computing) chip, also functions as an AppleTalk router.

The Netway 2000 costs $9,995, the Ethernet option costs $2,795, and the token-ring option costs $3,695.

Avatar Corp. is located at 65 South St., Hopkinton, Mass. 01748; (508) 435-3000.

Digital Communications Associates Inc. is located at 2010 Fortune Drive, San Jose, Calif. 95131; (408) 432-9111.

Tri-Data Systems Inc. is at 3270 Scott Blvd., Santa Clara, Calif. 95054; (408) 727-3270. □

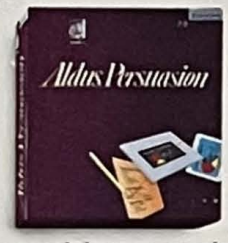
Irwin cuts drive prices

Ann Arbor, Mich. — The Irwin Products Group last week cut retail prices of its 40/60- and 80/120-Mbyte minicartridge tape backup systems for the Mac by $400 each.

The company, part of Cipher Data Products Inc. of San Diego, said the price of the Irwin Model 5040, which can store 40 or 60 Mbytes of data per cartridge, has been reduced 29 percent to $995. The Irwin Model 5080, which uses extended-length tape cartridges to store 80 or 120 Mbytes of data, will now cost $1,295, down 24 percent.

The drives are shipped with EzTape, which lets users select files for backup with icons and menus. Irwin's Universal Tape Format feature allows ASCII text and files from many popular applications to be shared among Mac, MS-DOS and OS/2 computers.

The Irwin Products Group is located at 2101 Commonwealth Blvd., Ann Arbor, Mich. 48105; (313) 930-9000. □



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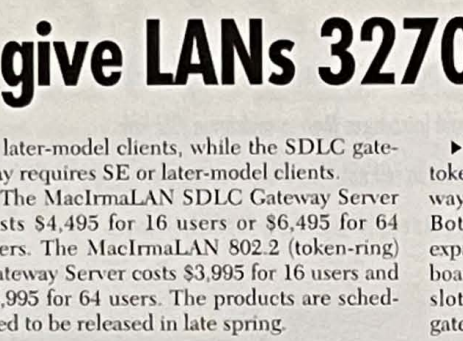

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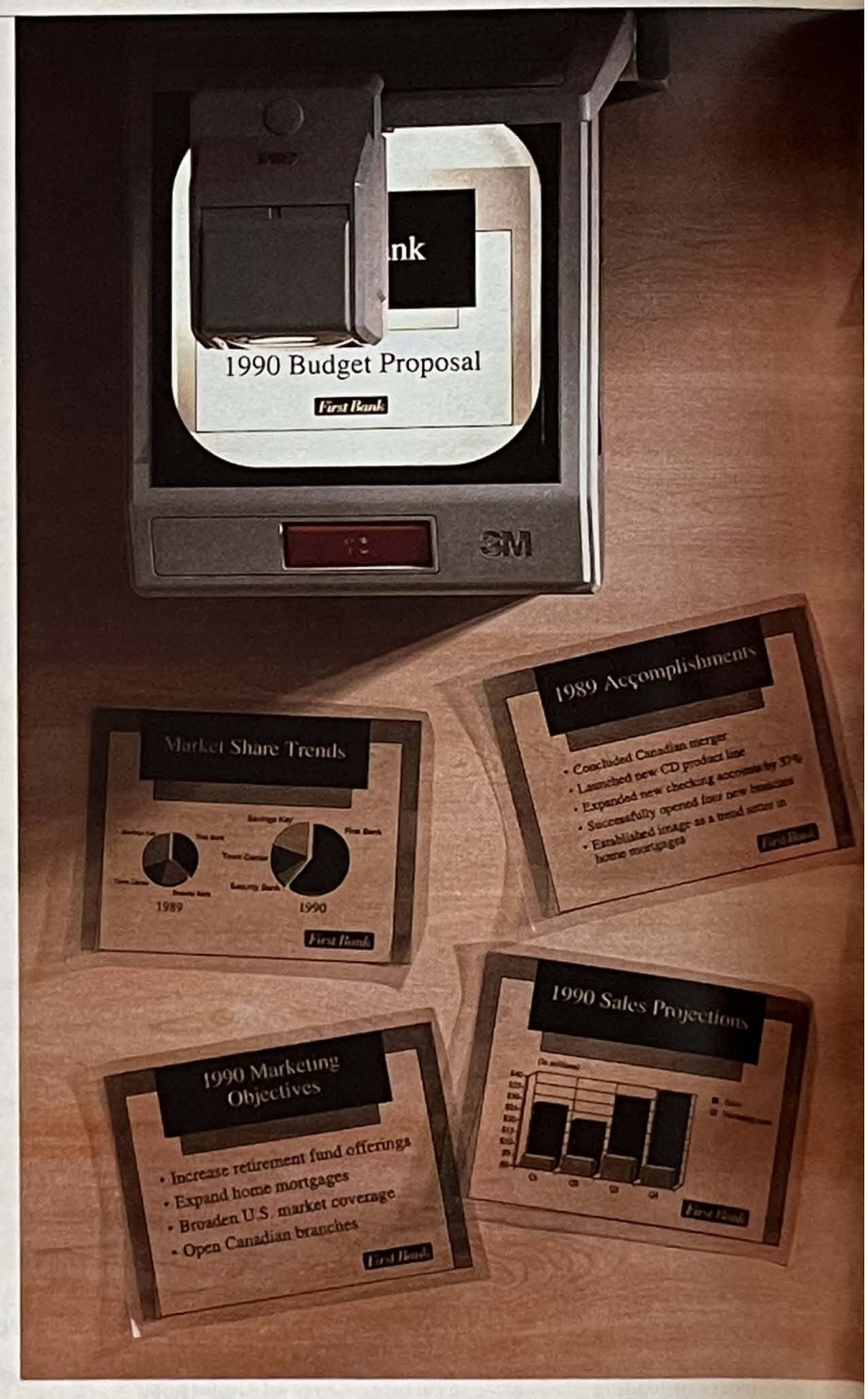

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MacTwin links Macs, midrange IBMs

By John Battelle

Bothell, Wash. — Emerald Technologies Inc. last week introduced MacTwin, a hardware and software combination for connecting Macintoshes to IBM AS/400 and System/3x midrange computers.

MacTwin consists of a twinaxial board and Macintosh software for terminal emulation. An optional file transfer program also is available. MacTwin supports color sessions and printing to both host and Macintosh-based printers. The Macintosh front end includes a macro recorder and can support up to seven simultaneous host sessions.

"I certainly have enjoyed [MacTwin] over our previous System/38 link," said Lynette Thomas, customer finance representative at Physio Control Corp. of Redmond, Wash. She said MacTwin is easy to use, particularly in its support for keyboard controls.

MacTwin is available now for $995 for the Mac SE and SE/30 versions or $1,095 for the Mac II version. Emerald's Emulator Transfer Utility, a file transfer program that runs on the host, costs $450 to $900, depending on the system.

Emerald Technologies Inc. is located at 18912 North Creek Parkway, Suite 102, Bothell, Wash. 98011; (206) 485-8200. □

Varityper controller offers a wide range of imagesetting options

By Pamela Pfiffner

East Hanover, N.J. — In a flurry of announcements last month, Varityper Inc. introduced a new modular image controller, a new film recorder that will be available at three resolutions and a series of other enhancements to its high-resolution imagesetting line.

The new Series 4000 Image Controller, equipped with an Adobe PostScript interpreter, works with Varityper output devices ranging from 600-dpi plain-paper imagesetters to a 3,048-dpi film recorder.

The system can be tailored to users' needs for speed, productivity and price. Options include:

- Speed Plus, a processor that delivers 50 percent more rasterizing speed than the standard units.
- RAM configurations ranging from 4 to 12 Mbytes.
- 20-, 42- or 91-Mbyte RIP (raster image processor) disks for graphics and font storage.
- Image-buffer disks ranging up to 330 Mbytes in capacity for buffering large page sizes, multipage documents and complete sets of color separations. The document-buffering feature allows multiple pages to be rerun at full output speed without re-rasterizing, the company said.

Prices for the processor range from $14,000 to $32,000, depending on configuration. All options will be available as field upgrades as users' needs evolve.

Because the image controller is a separate unit, one interpreter can control two output devices. According to Varityper, such flexibility represents a first for Adobe PostScript devices.

Robert Escalona, desktop publishing manager at Dimensional Graphics, a service bureau in Roselle, N.J., gave the Series 4000 processor high marks. "It's a lot faster," he said, pointing to the RIP's ability to process an entire image at once and queue up jobs without "re-RIPing" images. "In the Quality mode you can process an image at 2,400 dpi with the speed of 1,200 dpi," he added.

Later this month, Varityper will release PrintMaster, a $495 desk accessory that lets users control the processor from the Mac. "The new software drives everything through your terminal," Escalona said, "so you don't have to walk back and forth."

The new Speed Plus processor option also is available as a retrofit for Varityper 4300P and 4200B-P imagesetters.

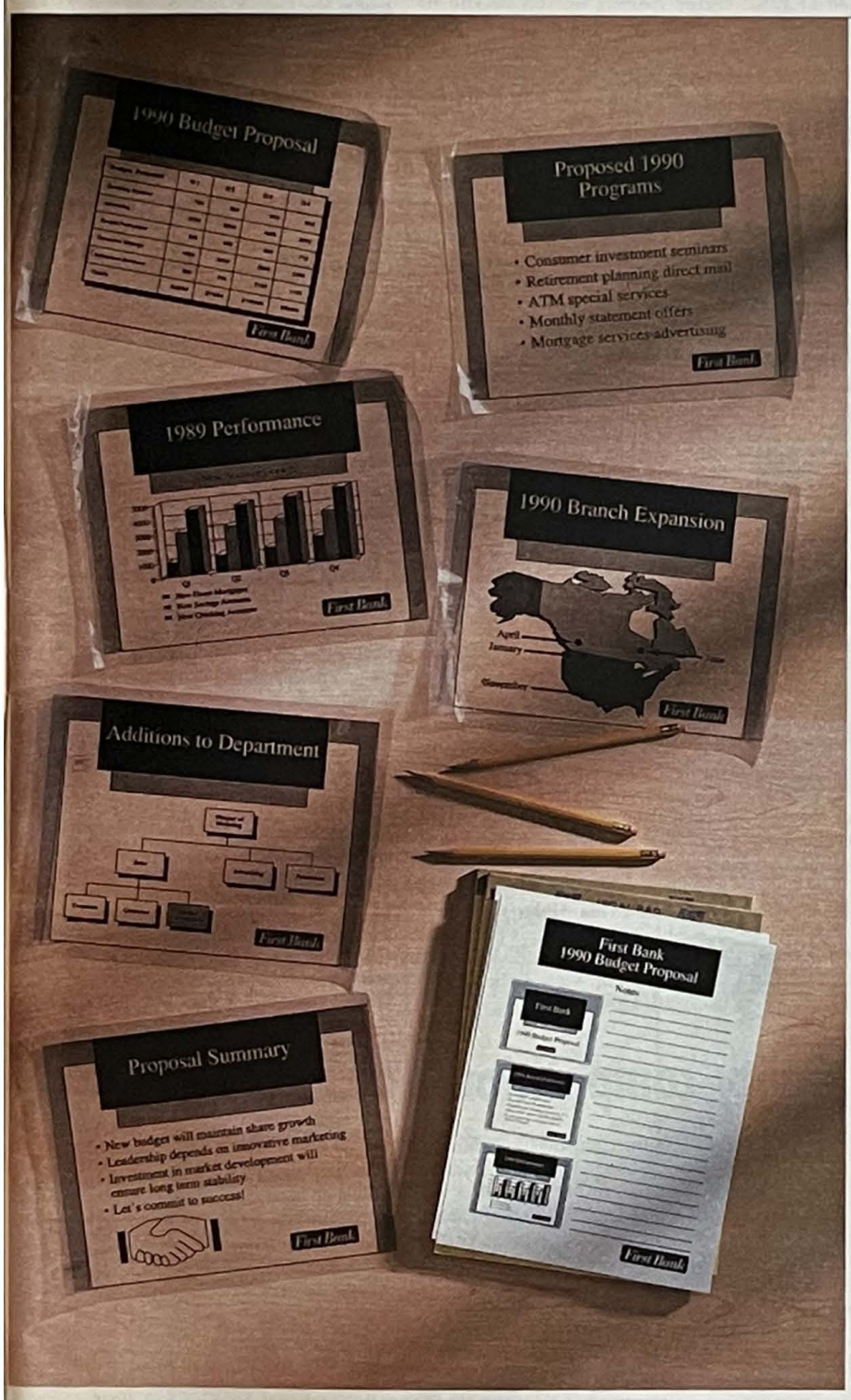
In addition, the company introduced a new film recorder, the 5300, that can be used with the Series 4000 controller. The device will be available at resolutions of 1,200 dpi, 900/1,800 dpi or 1,200/2,400 dpi.

Varityper also introduced an automatic toner-replenishing mechanism for its VT600 imagesetters. The replenisher quadruples the imagesetter's monthly duty cycle to 12,000 pages, the company said. The mechanism is now shipping with new VT600P and VT600W imagesetters and can be retrofitted into existing systems at a cost of $995.

Varityper also added a 42-Mbyte hard disk option for the VT600. The drive is priced at $995 when ordered with the imagesetter and $1,495 when purchased as an upgrade.

Additionally, Varityper now offers the entire Adobe Type Library for its imagesetters.

Varityper Inc. is at 11 Mt. Pleasant Ave., East Hanover, N.J. 07936; (201) 887-8000. □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Shiva adds 9,600-bps net modem

By John Battelle

Cambridge, Mass. — Shiva Corp. plans to unveil the latest generation of its NetModem line of network modems at the NetWorld trade show in Boston next week.

The NetModem V.32 is a 9,600-bps version of Shiva's NetModem V2400, which has been shipping since early 1988. Shiva popularized the concept of sharing modems over LocalTalk LANs with a 1,200-bps version of the NetModem introduced in 1987.

The NetModem V.32 is based on the V.32 standard for 9,600-bps transmission adopted by the Consultative Committee International Telegraph and Telephone.

But the NetModem is more than just a faster version of the V2400, according to Dan Schwinn, president of Shiva. Based on a 10-MHz Motorola 68000, the NetModem is "a platform for future applications" and upgrades from Shiva. Because it has its own RAM, ROM and processor, the NetModem V.32 can be upgraded through software to support new features such as TCP/IP (Unix) and IPX (Novell NetWare) networking protocol stacks. Other applications and products will be available for the NetModem V.32 platform, Schwinn said, although he declined to provide details.

Besides being used as a shared network resource, the NetModem V.32 will support Shiva's Dial-In Network Access, or the capability to become a full member of the network from a remote Mac over phone lines. It also will support telebridging, or the linking of two separate networks over phone lines.

Shiva also announced last month a new version of DOS Dial-In, which allows remote IBM PCs and compatibles to dial into a LocalTalk LAN. Version 1.01 adds support for several electronic-mail packages, including CE Software Inc.'s QuickMail and TOPS' InBox.

The NetModem V.32 will ship in March for $1,999. DOS Dial-In retails for $99; upgrades are free.

Shiva Corp. is located at 155 Second St., Cambridge, Mass. 02141; (617) 864-8500. □

Fastback tape drive offers big backups

By Henry Norr

Baton Rouge, La. — Fifth Generation Systems Inc., a company best known to Mac users for its backup and utility software, last week entered the tape backup hardware market with a 120-Mbyte cartridge tape drive.

The Fastback Tape FB120, available immediately for $1,395, will store up to 129 Mbytes of uncompressed data on a DC-2165 cartridge. The new SCSI drive will be bundled with an updated version of Fifth Generation's $189 Fastback II backup application.

Using Fastback II's compression option, the company said, users will typically be able to fit more than 200 Mbytes of data on the audio-cassette-size cartridges. With certain types of data, such as database files, a tape can hold as much as 400 Mbytes, according to Fifth Generation.

The drive's automatic error correction firmware allows restoration of all data even if as much as 33 percent of a tape is damaged, the company said. Fastback II provides numerous file selection options and a macro language that can be used to schedule unattended background backups.

Fifth Generation is at 10049 N. Reiger Road, Baton Rouge, La. 70809-4562; (504) 291-7221. □

Big, bigger, biggest: Colossal outputs jumbo PostScript

San Francisco — A service bureau here is helping its customers get the big picture with a PostScript-clone plotter controller developed by Colossal Graphics Inc. of Palo Alto, Calif.

Blue Print Service Co. can output color PostScript files on plain paper or on 4mm film with an image area up to 42 inches wide and up to 25 feet long, without tiling. BPS' system consists of a dedicated workstation with a proprietary board connected to a Versatec 400-dpi plotter. Freedom of Press from Custom Applications Inc. of Billerica, Mass., acts as interpreter, with Colossal's PowerScript software providing necessary filters.

RON GRANT TUSSY

Ron Jones, CEO of Colossal Graphics (left), and Tom Raver, CAD operator at Blue Print Service, show output from Colossal's large-format PostScript-clone plotter.

BPS is the first U.S. service bureau to employ Colossal's technology, but shops in Seattle, Los Angeles and Chicago will soon offer large PostScript output via modem as part of the ReproCAD Network, an organization of 59 blueprint companies, including BPS.

ReproCAD Network is located at 3470 Mt. Diablo Blvd., Suite A-150, Lafayette, Calif. 94549; (415) 283-7860; (800) 395-7523. □

MacTools Deluxe guns for utility competition

By Henry Norr

Beaverton, Ore. — Central Point Software Inc. last week unveiled a new multipurpose utilities package and an aggressive upgrade policy designed to make the program a standard among Mac users.

Due next month, the $129 MacTools Deluxe will include disk optimization and partitioning, an encryption desk accessory, a backup application, and several kinds of recovery tools. The MacTools optimizer works up to four times faster than its competitors, according to Central Point, and offers a color display that lets users monitor the cleanup.

The new program also includes a Control Panel device (cdev) for undeleting trashed files, a Startup document (INIT) that creates a mirror copy of the disk directory, and selective searching and viewing options that speed file recovery. The backup program now provides a tree display of files and lets users save and recall setup files.

"As a package, it's dynamite," said Houston Hall, an NBC cameraman based in Burbank, Calif., and San Francisco and a MacTools beta tester. "It does four or five important things and does them very well."

Registered owners of Central Point's PC Tools Deluxe for the Mac, which will be discontinued, and Copy II Mac can get the new package for $15. Until April 30, the company also will offer it for $25 to anyone who sends in the first page of the manual of any Mac utility that offers one or more of MacTools' functions.

Central Point Software Inc. is located at 15220 N.W. Greenbrier Parkway, Suite 200, Beaverton, Ore. 97006; (503) 690-8090. □

MacTools Deluxe from Central Point features a unique color display that lets users watch the program at work.

ATM 1.2 shipped with font promo

By Pamela Pfiffner

Mountain View, Calif. — Adobe Systems Inc. begins shipments this week of an upgrade to Adobe Type Manager.

Version 1.2 of the font display software promises more-accurate letter spacing on screen and in ImageWriter output, the company said, by making adjustments for programs that do not fully support fractional font widths, such as Microsoft Word 4.0.

The new version also offers better bolding on screen, especially in smaller font sizes; faster processing of type in large point sizes; and support for Bitstream Type 1 fonts. A program for printing banners on the ImageWriter also is included.

Registered ATM owners will receive the update free of charge.

Ivar Michelsons, product marketing manager for Adobe's application product division, said the company's market research showed that of the more than 100,000 ATM purchasers, 70 percent to 75 percent of them do not use PostScript and 70 percent have never purchased a PostScript typeface.

To educate these customers, the company will offer ATM owners a coupon giving them the opportunity to purchase any one Adobe Type Library font for $39 plus $7.50 shipping and handling.

In addition, two companion products for ATM, called Adobe Type Sets 1 and 2, are scheduled to ship Feb. 15. Each $99 collection contains seven display fonts designed to look good on a variety of output devices, including non-PostScript printers. These display typefaces include Bodoni Poster, Cooper Black and Hobo.

Adobe Systems Inc. is located at 1585 Charleston Road, P.O. Box 7900, Mountain View, Calif. 94039; (415) 961-4400. □

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More Rave Reviews for the #1 SQL Database.

PC WEEK

Oracle for Mac Solves DBMS Puzzle

SQL/HyperCard Combo Produces Sophisticated Applications

By Susan Janus

Database giant Oracle Corp., of Belmont, Calif., recently rounded out the list of platforms supported by the company's relational database-management system (DBMS) with the release of Oracle for Macintosh.

The new Mac DBMS teams the power of Oracle's Structured Query Language (SQL) with HyperCard's customizable and easy-to-use interface.

This combination allows Mac developers to create sophisticated applications that appear simple to users—a unique software-development opportunity unavailable on any other platform, including the PC, according to early corporate users we contacted.

In addition, users said, the network version of Oracle for the Mac allows the advantages of the HyperCard interface to serve as a front end to existing corporate relational databases residing on other platforms, such as mainframes and minicomputers.

Consequently, the Mac software has great potential for su[illegible]

oping database-manageme[illegible] systems to connect departmental Macs to larger systems. Jeff Menz, a systems analyst for a scientific R and D organization, is currently using Oracle for Macintosh to develop a system that will give the company's numerous Mac users access to an Oracle database running on a VAX. Using the networking version, Menz will link departmental AppleTalk networks to the VAX over a TCP/IP network.

Oracle Provides the Groundwork

The key benefit of Oracle's product is that "all the fundamental technical work—the protocols, the compatibility with the AppleTalk network—has been done by Oracle," Menz said. "I just have to build the HyperCard interface and do the database design work."

The result will be an Oracle relational-database application on the VAX with a HyperCard front end that Mac users feel comfortable with, he explained. Also, the company will have one logical relational database instead of numerous fragmented local databases. This allows tighter security, improved data integrity and better performance, he added.

Oracle for Macintosh

DBMS Brings New Power and Face to Mac Application Development

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Reorganization

From Page 1

Spindler to the second-highest executive position in the company. Sculley called Spindler a "brilliant operational strategist," whose appointment "will allow me to focus on more long-term strategic and technical matters."

Jean-Louis Gassée, president of Apple Products, will continue to report to Sculley and direct the product engineering, networking, and communication and advanced technology groups (see chart, this page).

Product marketing and manufacturing, formerly under Gassée's jurisdiction, now report to Spindler, as do the three sales and marketing divisions, Apple USA, Apple Europe and Apple Pacific.

Apple watchers were generally pleased with the changes.

"Mike is extremely strong on the big-picture, conceptual side, especially related to product marketing and channel distribution. And no one else in the company has his worldwide perspective," said William Holtzman, who worked with Spindler at Apple and is now general manager for Claris Pacific. "But he faces a challenge on the operational side."

"This is more upheaval than we expected six months ago, but you can't help but be encouraged," said Peter Rogers, an analyst with Robertson Stephens & Co. in San Francisco. "We have seen the company regroup and protect earnings. We are seeing them re-energize the management team. We were afraid they'd do nothing."

Loren resigned after 18 months in a position for which many analysts believe he was ill-suited. His prior experience was in information systems, not running a high-profile sales and marketing effort.

The changes leave vacancies at the top of Apple USA and Apple Europe. Sculley said during an

MICHAEL GRECCO

Allan Loren: Meteoric rise, sudden fall.

interview at the stockholder's meeting here last week that the European position would be filled soon. According to sources close to the company, one of the highly regarded candidates is Sören Ollson, vice president and managing director of Apple Sweden and Europe North.

The Apple USA presidency may take longer to fill, Spindler said. "I haven't made any decisions yet. First, I need to assess the situation. This is a process of building from where we are."

Sculley explained that putting manufacturing and marketing in Spindler's realm "makes good sense so the COO can make trade-offs between the requirements of the marketplace and getting products out."

Relieved of product marketing and manufacturing, Gassée will have more time to wrestle with developing less-costly machines and getting them to market faster, analysts said.

"Clearly, Gassée has done a good job with the product line, but since the Mac IIcx was introduced, product development has not been hitting on all cylinders," said Stewart Alsop, publisher of the P.C. Letter in Redwood City, Calif. "They [product development] got so religious about 32-bit clean architectures and System 7, that they blew off the middle of the product line."

According to Rogers, Apple's future success will require close cooperation between Gassée and Spindler. "It's hard to do product marketing if the guy who's doing the marketing and the guy who's doing the products don't talk to each other. The only way either Spindler or Gassée will succeed is if they can get along better than the previous team," he said. □

Annual meeting

From Page 1

Despite the commitment to low-cost Macs, Sculley said, "We have no intention of abandoning the Apple II."

▶ Apple's reseller and distribution systems are due for an overhaul. "It is clear that something is wrong," Sculley said. "Resellers are not making enough money."

In his prepared remarks to stockholders, Sculley said the company "would extend the AppleCentre concept," a system of Mac-only dealerships developed on the European home turf of Michael Spindler, new chief operating officer. While Spindler would not say whether he will create AppleCentres in the United States, he said that Apple needs "a distribution system that adds value rather than moves boxes. Customers want service, support and no nonsense."

▶ Spindler intends to put greater emphasis on customer service and support. When asked if customers will get a one-year warranty, he said, "They'll get it."

▶ Sculley acknowledged for the first time that Apple's previously announced cost-cutting measures will include layoffs during the quarter ending March 31. "We don't know the numbers or where it will occur. We will try to do it as humanely as possible," Sculley said.

Sculley denied that the frequent reorganizations in Apple USA have been disruptive and defended lucrative compensation packages offered to recent executive hires.

Recalling that 1989 had been Apple's year of the CPU, Sculley said, "1990 is the year of management tightening down and implementation."

▶ The expense cuts are necessary because of severely reduced revenue expectations for 1990, down from 20 percent growth to just 10 percent. "We miscalculated in the United States," Sculley said. He attributed the drop-off to "a year of transition for Apple and the industry as a whole. ... There has been a slowdown of buying patterns because of the confusing array of products and fragmentation of the market."

▶ Apple will combat the perception that other platforms are competitive with the Mac with "very focused marketing on what the Mac advantages are," Sculley said. In the past year, Apple's marketing and promotion campaigns have been criticized for being too conceptual and unfocused.

In addition to marketing focused for specific markets and regions, "We will try to develop a generic marketing concept that is sustainable around the world," Spindler said.

At the annual meeting, shareholders re-elected Sculley, A.C. Markkula, Peter O. Crisp, Arthur Rock, Albert A. Eisenstat and John A. Rollwagen to the board of directors. Director Sally Ride did not stand for re-election and was not replaced. □

Apple's Franco-Prussian alliance

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Apple Pacific
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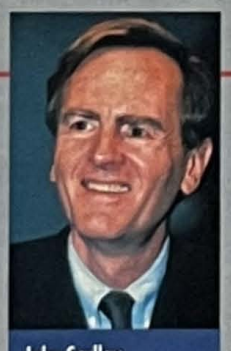

John Sculley, chairman and CEO

Chief Financial Officer
Human Resources
Strategic Investments/Legal

Jean-Louis Gassée, senior VP; president, Apple Products

Product Engineering
Networking & Communications
Advanced Technology

System 7.0 hits Berkeley

By Daniel Farber

Berkeley, Calif. — Apple confirmed expectations about several features of System 7.0 and revealed others at a users group demonstration here last week.

Chris Espinosa, system software marketing manager for Apple USA, led six software engineers in the presentation to a crowd of 600 at the BMUG Mac 90 show, held Jan. 31 on the University of California campus here.

Espinosa confirmed many items previously reported (see MacWEEK, Dec. 12, 1989, and Jan. 9), including the integration of Macintosh FileShare networking software. He said that Apple will include just a core set of outline fonts with the System and will rely on third parties to supply a variety of typefaces. "We're not looking at being in the type business; we just want to sell computers," he said.

New revelations include:

▶ Distribution. System 7.0 will likely be sold in a package with about eight disks and printed documentation for the same $49 retail price as the current System. It will also be distributed on CD-ROM and through users groups and online services.

▶ Installation. A new installer will allow adminstrators to upgrade all Macs across a network by "pressing one button and waiting awhile."

▶ Improved Finder browsing. The new Finder will include auto-scrolling and selection-by-typing of files as well as a hierarchical outline view of folders.

▶ Fast find. A find feature in the Finder will locate files in three seconds on a full 80-Mbyte hard disk and almost as fast across networks with Macintosh FileShare.

Espinosa said that System 7.0 is in alpha test now, with all Apple Partners and Associates slated to receive beta copies. The user release is on schedule for summer, he said, warning the eager crowd, "You know software, though." □

Spindler

From Page 1

faces in the coming decade."

An engineer by training, Spindler joined the company in 1980 as marketing manager for Apple's European operations after serving as European marketing manager for both Intel Corp. and Digital Equipment Corp.

He spent the past 10 years moving steadily up the ranks, serving as general manager of Apple's European marketing and sales operations before being promoted in 1985 to vice president in charge of Apple's international marketing and sales division, based here.

In 1988 he returned to Europe where he served, until last week, as president of Apple Europe. There, Spindler reigned over Apple's 12 European subsidiaries and supervised the company's European sales and marketing efforts out of the Paris headquarters.

He is credited with helping to build a strong retail operation that included promoting AppleCentres, retail outlets that showcase Macintosh technology (see related story, Page 75).

"The fact that he was able to succeed in Europe, which is a diverse set of cultures and markets, shows that the organization was being managed well," said Eugene Glazer, senior vice president with Dean Witter Reynolds in New York.

Spindler's management style has earned him the nickname "diesel": He's slow to start, but once he gets going he's unstoppable, according to Stewart Alsop, editor of the P.C. Letter, based in Redwood City, Calif., who recently interviewed Spindler in Paris.

"He obviously has command of distribution, marketing, product-line management and management in general. And he brings a consistent point of view and approach to growing Apple. Spindler may not be tremendously well-liked at Apple Europe, but he is very well-respected," Alsop said. □

RasterOps

From Page 1

according to Dave Smith, vice president of engineering.

It automatically converts National Television System Committee and S-Video signals for display on the Mac RGB (red, green, blue) monitor. A version of the board will also be available that supports the European PAL video standard.

Although Mass Microsystems Inc., Orange Micro Inc. and Workstation Technologies Inc. offer boards that bring live color video to the Mac screen (see MacWEEK, Nov. 21, 1989), none offers the combination of features promised by RasterOps for a comparable price.

"Video is kind of the LaserWriter of multimedia," said Nick Arnett, editor of the Multimedia Computing & Presentations newsletter, which is based here. "The price is encouraging to people who are trying to do multimedia applications because it helps lower the cost of the delivery system and push the technology into the mainstream."

The board will ship with four applications: a Control Panel device (cdev) that controls color and resolution; a desk accessory that controls the video inputs, such as interactive sizing and scrolling of the live-video window; a frame grabbing application; and a series of HyperCard and SuperCard external commands for incorporating video into stacks.

RasterOps also will offer add-on peripherals for the ColorBoard 364, including an external encoder box that converts Mac images to NTSC format; as well as an external TV tuner box and DA that give the Mac control over television and cable TV input, such as channel selection and volume.

The second addition to RasterOps' color line up is the ColorBoard 208, which Smith described as "basically the 264 [RasterOps' low-cost true-color board] without all the video RAM."

The 208 supports one-, two-, four- and eight-bit color. It can be upgraded to support 24-bit color with the purchase of one additional megabyte of 100-nanosecond video RAM, available at many computer dealers. RasterOps also will offer the memory upgrade for $395.

The 208 supports a resolution of 640 by 480 pixels at 72 dpi on an Apple 13-inch or compatible monitor. Besides delivering a 66-Hz refresh rate, the 208 supports the 30-Hz RGB NTSC standard.

The ColorBoard 208 sells for $495. Apple's standard eight-bit video card retails for $648 and is not upgradable to 24-bit color.

RasterOps also dropped the price of the 24-bit ColorBoard 264 from $995 to $795. The company is realizing these price cuts by reorganizing its distribution strategy, focusing more on dealers and cutting out the distributor channel, according to Frank Leonardi, senior vice president for sales and marketing.

SuperMac Technology Inc. of Sunnyvale, Calif., also offers an inexpensive 24-bit color board, the $999 ColorCard/24. SuperMac does not offer an entry-level eight-bit version of its card, but it can be fitted with a $499 accelerator (see MacWEEK, Oct. 31, 1989). RasterOps does not currently offer acceleration for its new card.

RasterOps' ColorBoard 208 will ship by the end of the month, the company said. The new ColorBoard 264 price is effective immediately.

RasterOps Corp. is located at 2500 Walsh Ave., Santa Clara, Calif. 95051; (408) 562-4200. □

MORE to come from Symantec

By Carolyn Said

Cupertino, Calif. — Business-graphics generation, a tutorial feature, an improved interface and better drawing tools will enhance a new version of MORE II, Symantec Corp.'s outlining and presentation package. The new version, expected by April, "makes it easier to do what you want to do," one beta tester said.

An option called Chart Tutor walks users through the process of creating a presentation. Matching a feature offered by competitors, the new MORE II will generate pie, bar, column and line charts.

More alignment options, fill patterns and shadowing styles will be available in the program's drawing module. The program now "takes advantage of everything the Mac has to offer for color," a user said. It offers color gradations ranging from 0 percent to 100 percent. A small on-screen window for previewing art has also been added, and a new Selection Bar lets users select and modify non-contiguous items within an outline, users said.

A company spokeswoman refused to comment about unannounced products but said Symantec often prices new versions at $50 to $100 more than earlier releases and charges $50 to $60 for upgrades. The current version of MORE II sells for $395. □

Claris

From Page 1

programming language that could be used to connect disparate applications (see MacWEEK, Jan. 9).

Claris intends to use the announcement of the EQT purchase as an opportunity to clarify its "overall information management strategy," including how its family of Macintosh products will work together and connect to other platforms and software products.

Red Brick's EQT connects to host databases through Apple's CL/1 connectivity language as well as through application programming interfaces from database giants Oracle Corp. of Belmont, Calif., and Sybase Inc. of Emeryville, Calif.

Prior to this purchase, Red Brick had positioned EQT as an ad hoc decision support tool for managers who need access to company information but are not versed in SQL. EQT presents familiar buttons, check boxes and other Macintosh interface features as the means of navigation through corporate data. An administrative module is included so that database administrators can tailor EQT to each user's needs.

Claris Corp. is at located 5201 Patrick Henry Drive, Santa Clara, Calif. 95052; (408) 987-7000.

Red Brick Systems is located at 485 Alberto Way, Los Gatos, Calif. 95032; (408) 354-7214. □

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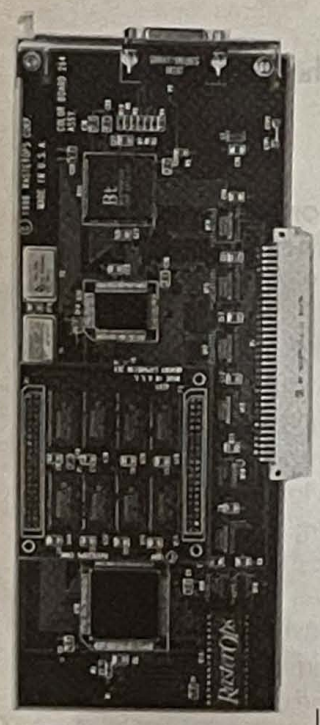

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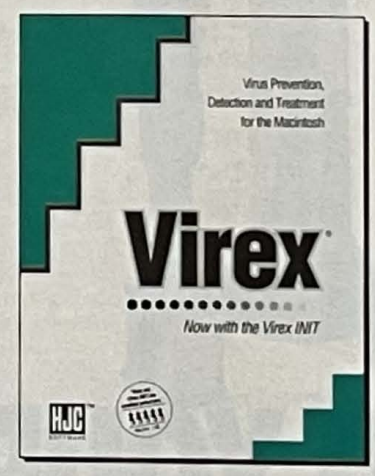

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Deneba's UltraPaint may set pace

Low-end all-in-1 graphics package

REAL SOON

By Bruce Fraser

Deneba Software is putting the finishing touches on UltraPaint, a graphics package that company President Manny Menéndez said will "shatter the Mac graphics status quo." The program, which runs on Macintoshes from the Plus to the IIci, combines black-and-white painting, eight-bit color painting, gray-scale image-processing and object-oriented drawing in a single entry-level package.

At $199, UltraPaint represents a direct challenge to the similarly priced SuperPaint 2.0 from San Diego-based Silicon Beach Software Inc. as well as to the large collection of eight-bit color paint programs already on the market for the Macintosh.

Deneba's new offering also appears to undermine the market for its own recently upgraded Canvas, another program that combines drawing, painting and other graphics tools. But the company, which originally offered Canvas as a low-cost all-in-one package, has gradually shifted its positioning and now markets Canvas Version 2.1 primarily as a drawing and drafting program targeted at Claris Corp.'s MacDraw II.

A bulging toolbox. The heart of UltraPaint, on the other hand, is a beefed-up set of traditional paint tools. The Lasso tool, for example, offers four basic options: a standard Lasso, a comprehensive Lasso (which includes white space in the selection), and oval and polygon Lassos.

Keyboard shortcuts further modify each Lasso tool. Holding down the Command key excludes the color directly under the tip of the Lasso from the selection. The Control key puts the Lasso in "additive mode," letting you make multiple selections, while the Control and Option keys together put it in "subtractive mode" for refining selections.

A different set of tools is used in draw layers. To the usual geometric object tools, UltraPaint adds polygon, Bezier curve and free-form drawing tools. You can reshape free-form objects at any time: The control points offered vary depending on whether the free-form tool is set to create polygons, smooth polygons or Bezier curves.

To position objects accurately in a draw layer, you can snap them to UltraPaint's user-definable grid, type coordinates into the Object Info dialog box, or use the rulers. Rounding out the drawing features are a choice of several types of dashed lines, a variety of arrow styles and a powerful Duplication command. Duplication not only lets you set the number of copies, their offset and direction, but also lets you define a starting and ending color or pattern to produce differently colored copies. You can define an angle and center of rotation for rotated copies as well.

UltraPaint lets you use up to eight layers, only one of which may be a paint layer. Other layers may be draw layers or composite layers that use both drawing and painting tools. All layers allow up to 600-dpi resolution, with a drawing size of up to 81 square feet. You can hide or gray out background layers to simplify working on complex illustrations.

Open architecture. UltraPaint has an open architecture, allowing you to use "external" tools, which are small files kept in a special UltraPaint Tools folder. Some of these tools appear in a special palette, others as menu items. Together they offer a tempting package of goodies.

A three-color Airbrush tool has variable flow, size and splatter rates for each color. A Magic Wand tool selects areas of similar coloration. You can choose to select all areas of the chosen color or contiguous areas only, and you can vary the tolerance of the color match. An Eyedropper tool lets you "pick up" a color. A Blotter Brush duplicates the effect of using ink on porous paper — the longer you hold down the mouse button, the farther the paint spreads. Water-drop and Finger tools work like their real-world counterparts.

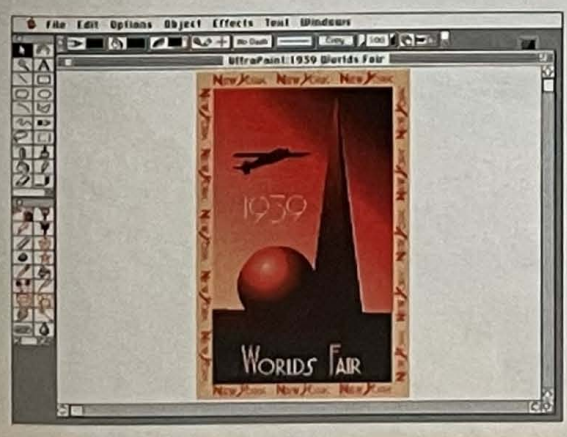
Other externals address gray-scale image processing. The Grayscale Manager controls contrast and brightness, and the Sharpen and Blur commands are self-explanatory. Lighten and darken brush tools provide an equivalent to darkroom dodging and burning, and the Luminance command brightens or darkens the image as a whole.

Multiplex icons. To keep all this power accessible, UltraPaint extends the standard paint program interface in some interesting ways. All the tool, attribute and color palettes are resizable and scrollable windows. These "float" in front of the drawing or remain hidden. Many of the palette icons are "multiplex" icons: They are modified by pop-up menus, dialog boxes or both. These extensions to the standard interface prove quite intuitive in use.

In addition to its own native format, UltraPaint can save and open PICT, PICT2, Startup Screen, MacPaint and TIFF files. It can also open, but not save, MacDraw 1.9.5 files.

Deneba has priced UltraPaint aggressively. If the company succeeds in shipping a bug-free product, it will have an opportunity to set a new standard of functionality for entry-level graphics programs.

Deneba Software is located at 3305 N.W. 74th Ave., Miami, Fla. 33122; (305) 594-6965. □



UltraPaint from Deneba features a palette full of new tools as well as modified versions of old friends such as the Lasso tool.

MicroNet device adds internal termination

By Henry Norr

Irvine, Calif. — MicroNet Technology Inc. last month released the Mother Board Terminator, a $35 device that can be installed in the Mac's internal SCSI port to provide termination for machines that have no internal hard drive.

The SCSI specification calls for termination at both ends of the bus, but the Mac's design provides no internal termination unless a terminated internal hard drive is installed. Users who choose to rely on an external drive may not be able to use certain SCSI peripherals reliably or at all, especially with newer and faster Macs like the IIci.

Apple manuals call termination confusing; many users call it a black art. Charles McConathy, president of MicroNet, said that an increasing volume of technical-support calls that involved termination issues, and his own staff's problems when testing external drive systems with a IIci, led the company to develop the new device.

MicroNet Technology Inc. is located at 20 Mason, Irvine, Calif. 92718; (714) 837-6033. □

News BRIEFS

The Font Company to release all new ITC fonts in PostScript

Phoenix, Ariz. — The Font Company announced last month that it will release all future International Typeface Corp. (ITC) type designs as PostScript fonts within 30 days of their publication by ITC. The Font Company will release all weights of new faces, in both Type 1 and Type 3 formats, according to spokesman Randy Kincaid.

The first typeface delivered in PostScript format under this plan is ITC Golden, based on the designs of 19th-century English poet and artist William Morris. It was released by ITC in December and by The Font Company last month. Including original, bold and black weights in both Type 1 and Type 3 formats, the font is priced at $169.95.

The Font Company collection now includes virtually all existing ITC text faces.

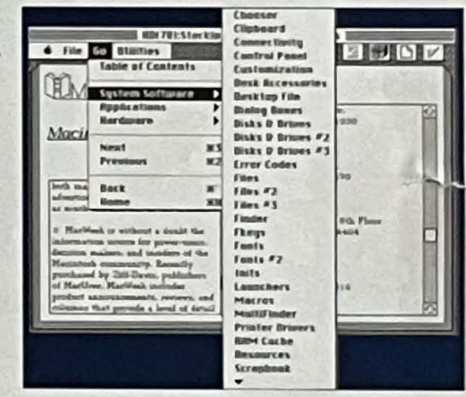
The Font Company is located at 12629 N. Tatum Blvd., Suite 210, Phoenix, Ariz. 85032; (602) 996-6606.

Encyclopedia Macintosh book now available in stack format

Boulder, Colo. — Encyclopedia Macintosh, a compendium of Mac tips, tricks, reviews and resources published in book form in December 1989, is now available as a HyperCard stack. Written by Craig Danuloff and Deke McClelland, the 781-page book ranges from basics to advanced topics such as error codes and customizing dialog boxes. It includes reviews, hints and quick-reference charts on leading Mac applications as well as a glossary of almost 400 terms.

The $50 stack, distributed by Heizer Software, includes the complete text and graphics from the book. Designed as a supplement to and not a replacement for the printed volume, it offers numerous navigational aids. Users can add their own product information and tips, and the authors promise that free stack updates will be issued over on-line services.

Heizer Software can be reached at P.O. Box 232019, Pleasant Hill, Calif. 94523; (415) 943-7667; (800) 888-7667.



The Encyclopedia Macintosh stack from Heizer Software lets users browse through product reviews as well as tips and tricks for handling basic and advanced Mac problems.

Golden Triangle kit provides high-speed SCSI link

San Diego — Golden Triangle Computers Inc. last month released the Asynchronous Support Package, a hardware and software combination that gives the Mac a second SCSI bus and allows sustained transfers between SCSI devices at speeds of up to 2 Mbytes per second, according to the company.

Combining Pronto, the company's high-speed SCSI interface card for the Macintosh II family, and direct control software, the new development tool is designed to link devices attached to the Mac's built-in SCSI bus, such as hard drives, to other devices connected to the Pronto card, such as printers and high-speed backup units.

Golden Triangle said the $1,200 package, which includes object modules, an interface library for the Macintosh Programmer's Workshop C, and a sample application, was developed in partnership with Dupont Imaging Systems of Newark, Del., to provide the high throughput needed for Dupont's 4CAST digital color imager.

Golden Triangle Computers Inc. is located at 4849 Ronson Court, Suite 217, San Diego, Calif. 92111; (619) 279-2100.

File Edit Style Item Page View Utilities

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Sunday's Victory. This high-te
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boat to plane easily at any ang
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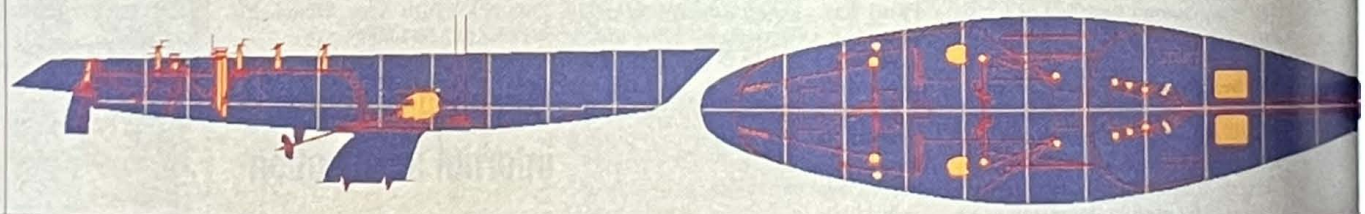

Page 1

PANTONE Color Specifier

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Radius PrecisionColor Calibrator

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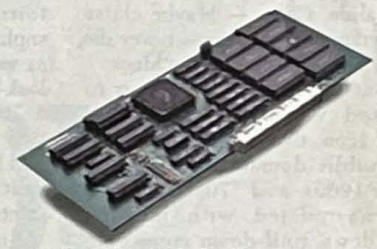

Radius QuickColor Graphics Engine
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Heizer beefs up HyperCard lineup

Windowing, macro tools join compiler

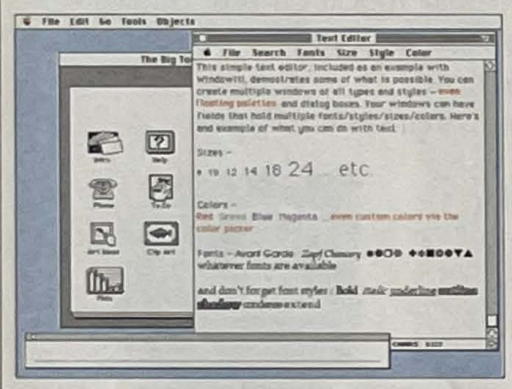
By Raines Cohen

Pleasant Hill, Calif. — Heizer Software last month announced a new series of retail products, including a major upgrade to its HyperTalk script compiler, an enhanced set of HyperCard windowing tools and a new macro recorder for stack developers.

The new line, called the Heizer Select Series, will have professional manuals and packaging and will be distributed through dealers as well as through the Heizer catalog.

The first three entries in the new series are:

▶ An update to CompileIt! The Script Compiler, which compiles HyperTalk scripts into external commands for faster execution and protection of source code. The new Version 1.5 compiles faster and provides background compilation under MultiFinder and improved Toolbox access, according to the company. The program now supports Silicon Beach Software Inc.'s SuperCard and features a modular design that will make it easy to add support for other products using HyperTalk scripts, according to Heizer.



Heizer's WindowIt! offers multiple windows and multifont text editing, among other capabilities, under HyperCard control.

▶ WindowIt! The Window Manager, a new package that evolved out of a shareware product called WindowTalk. Authors Guy de Picciotto and Jerry Daniels have improved and generalized the externals package to include color, multifont text editing, palettes, support for all window types and multiple simultaneous windows, the company said.

WindowIt! replaces WindowTalk Professional, an enhanced version announced but never released by Third Wave Computing Inc. of Austin, Texas (see MacWEEK, Sept. 26, 1989).

Ron Therian, Program Manager of Computing Architecture at GE Aerospace, a division of General Electric based in King of Prussia, Pa., attributed his company's recent purchase of several hundred Macs to WindowIt! "It was the only package out there with multiwindow, full-color capability," he said. "We're using it for mainframe connectivity, in conjunction with MITEMview [from Mitem Corp. of San Jose, Calif.]. Apple is lucky that the package came when it did."

▶ RecordIt! The Script Recorder, a new utility that adds a "watch me" mode to HyperCard for recording user actions and writing scripts that can repeat them. It bears a resemblance to the macro-recording functions of Microsoft Excel, according to Heizer's HyperMedia Products Manager Brian Molyneaux.

CompileIt! and WindowIt! will ship in mid-February, according to the company, and are priced at $99 each. CompileIt! upgrades are $30, or free to customers who purchased the program after Nov. 1, 1989. WindowIt! upgrades are $30 to registered WindowTalk users.

RecordIt! is due in March and will sell for $50.

Heizer is a clearinghouse for low-cost templates and development tools for Microsoft Excel and Works, HyperCard, and SuperCard. The company publishes a free quarterly catalog.

Heizer Software can be reached at P.O. Box 232019, Pleasant Hill, Calif. 94523; (415) 943-7667; (800) 888-7667. □

Catspaw tosses SPITBOL to Mac

By Carolyn Said

Salida, Colo. — Maybe classic programming languages never die, they just get ported to the Mac.

Catspaw Inc. late last year released versions of SPITBOL and Icon, two languages popular in public-domain releases from the 1960s and '70s that have been updated with multiple windows, pull-down menus and mouse access.

▶ MaxSPITBOL is a $195 implementation of a language known for its strong text-handling abilities. It is upwardly compatible with Bell Laboratories' SNOBOL4 programming language. SPITBOL is a faster derivative of SNOBOL.

"MaxSPITBOL is by far the best implementation of SNOBOL I've seen. The user interface is superb," said Marc Rochkind, president of Advanced Programming Institute in Boulder, Colo.

Rochkind said he used MaxSPITBOL to generate documentation, convert a PC Lotus Agenda file to Microsoft Word on the Mac and to do database publishing.

The language offers powerful string-matching capabilities, many high-level operators and a sophisticated use of memory, Rochkind said.

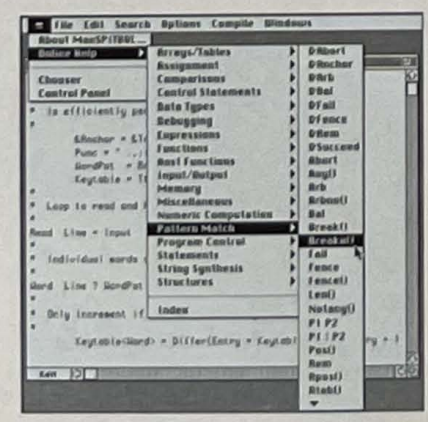
▶ Pro*Icon is a $175 implementation of Icon, a general-purpose language used for text processing, rapid prototyping, artificial intelligence and expert systems.

The language's strengths include automatic storage management, an extensive repertoire of string operations, and sophisticated data structures such as sets and tables with associative look-up, according to Catspaw.

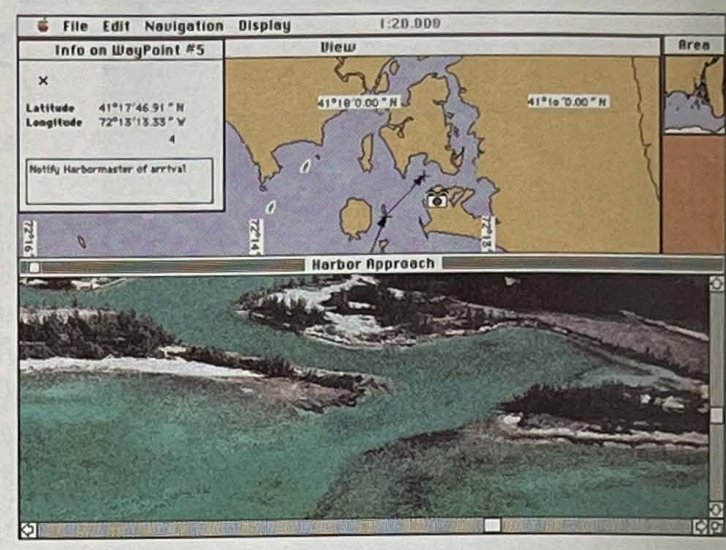
"People's eyes light up when they talk about these languages," said Mark Emmer, Catspaw's president. "You can craft neat, jewel-like solutions with them."

Both languages were created by Ralph Griswold, a noted computer scientist now at the University of Arizona in Tucson. Both offer power and ease of use, Emmer said. Icon, developed in the 1970s, incorporates mathematical expressions, goal-directed evaluation and complex string scanning. SNOBOL, a product of the 1960s, is more pattern-oriented, in that it recognizes various features in a text string, he said.

Catspaw Inc. can be reached at P.O. Box 1123, Salida, Colo. 81201; (719) 539-3884. □



Catspaw's MaxSPITBOL brings a programming language known for its strong pattern-matching and text-handling capabilities to the Macintosh.



Land ho with Fair Tide's Navigate! 3.0

Burlington, Mass. — Scanned photos of coastal landmarks alongside on-screen navigational charts will soon help seagoing Macintosh owners find their way to a safe haven with Navigate! from Fair Tide Technologies Inc.

Previous versions of the navigational software package let users plot routes on digitized color charts; the latest update allows aerial photos and other images to be scanned in and linked to charts.

Due later this month, Navigate! 3.0c, a color version, will be priced at $695; Version 3.0, in black and white, will be $395. Current users can upgrade by subscribing to the company's $49.95 one-year update support plan. An IBM PC version also is available.

Fair Tide Technologies Inc. is located at 18 Ray Ave., Burlington, Mass. 01803; (617) 229-6409.

Liberty adds 200MB mini drive

By Henry Norr

Santa Clara, Calif. — Liberty Systems Inc., a small company that counts some big names among its customers, recently added a 200-Mbyte unit and a redesigned case to its line of portable hard disks.

The company was a pioneer in the emerging market for miniature external storage units, releasing its first systems in the fall of 1988 (see MacWEEK, Oct. 4, 1988). The drives, incorporating a tiny power supply designed by Liberty, are about the same size as Apple's external 800-Kbyte floppy drives.

The new 200-Mbyte unit, based on a Rodime mechanism, is priced at $1,699. Liberty also offers 40-, 80- and 105-Mbyte Quantum-based drives, priced at $699, $949 and $1,099, respectively, and a $999 100-Mbyte Conner Peripherals drive. Models without power supplies, which draw power from the floppy drive port, are available at $100 less for all but the 200-Mbyte drive; they work with all SCSI-equipped Macs except the Mac II or IIx, as long as the floppy port is free, Liberty President Howard Winther said.

Among Liberty's customers are Morris Taradalsky, Apple's vice president of customer services and information technology; John Warnock, CEO of Adobe Systems Inc.; Reese Jones, president of Farallon Computing Inc.; and HyperCard guru Danny Goodman. "Of all my drives," Goodman said, "it's the one that gets the most abuse, because I take it with me to all my road shows and talks. But it's been very reliable. When I have to hook up to a strange Mac somewhere, I'm always confident that it's going to boot."

Liberty also offers a $50 international power supply, a $29 carrying case for the drives, SCSI interface cards for IBM PCs and compatibles, and extra SCSI cables and direct connectors for linking multiple drives.

Liberty Systems Inc. is located at 120 Saratoga Ave., Suite 82, Santa Clara, Calif. 95051; (408) 983-1127. □

Ehman cuts drive prices — again

Evanston, Wyo. — Ehman Engineering Inc., known as a low-price leader in the storage market, last month further cut the price of its external hard disks and established discounts on volume purchases.

After cuts of $50 on most models, Ehman's 20-Mbyte model now costs $349, its 30-Mbyte drive is $399 and the 45-Mbyte unit is $449. Drives of 60, 80 and 180 Mbytes are now priced at $549, $599 and $1,149, respectively. Ehman's 45-Mbyte SyQuest removable-cartridge drive dropped to $749.

Prices for 105- and 135-Mbyte disks remain unchanged.

The company also began volume pricing, offering discounts on three or more units.

Ehman drives are covered by a 30-day money-back guarantee and a two-year limited warranty.

Ehman Engineering Inc. is at 97 South Red Willow Road, Evanston, Wyo. 82930; (307) 789-3830. □

Distributed net products at the gate

Low-cost file share utilities enter race

By John Battelle

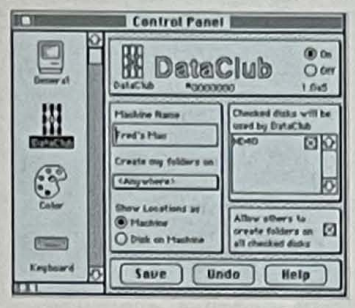
Mesa, Ariz. — Two companies are planning to beat Apple out of the chute this spring with new distributed networking products for the Mac.

ShirtPocket Software and International Business Software Inc. hope to find niches in an increasingly crowded market before Apple introduces Macintosh FileShare free with System 7.0 late this summer (see MacWEEK, Jan. 9).

▶ ShirtPocket this week will ship EasyShare. Priced at $99.95 for 10 users, EasyShare is one of the least expensive networking products available, according to company sources.

Jay Eaglstun, vice president of marketing for ShirtPocket, said his company is targeting the small office that doesn't want to dedicate a Mac as a server or learn system administration.

The EasyShare server is a desk accessory that allows a user to publish folders or an entire volume. The package includes password protection and uses the AppleShare client software distributed with the Mac System as an interface.



DataClub, one of two distributed networking products that will make its debut this month, pools all available disk space into one AFP server volume on the desktop.

▶ International Business Software this week will introduce DataClub, a distributed networking package developed as a base for a soon-to-be-announced network database.

Three products make up the DataClub line: the Unified File Server, an IBM PC gateway and DataClub Security, which gives the program AppleShare-like administration features.

Instead of presenting multiple published volumes, as does TOPS or EasyShare, the Unified File Server presents all available disk space on the network as one large volume. DataClub also supports the AppleShare client and includes a Control Panel device (cdev) for server and write-protect settings.

The Unified File Server supports multiple AppleTalk zones and as many users as the hardware can support, according to the company.

DataClub Security adds AppleShare-like administration features to the server, and the PC Gateway allows for bridging to multiple zones and for communications with IBM PCs and compatibles running Apple's AppleShare PC. The PC Gateway also includes software for setting up DataClub as a dedicated server.

DataClub Unified File Server will ship in April for $249 per machine. DataClub Security also will cost $249 per machine, and the PC Gateway will cost $499.

International Business Software Inc. is located at 1230 Oakmead Parkway, Suite 310, Sunnyvale, Calif. 94088; (800) 733-2822.

ShirtPocket Software can be reached at P. O. Box 40666, Mesa, Ariz. 85274-0666; (602) 966-7667. □

Tactic Software releases update of customizable icon-bar package

By Henry Norr

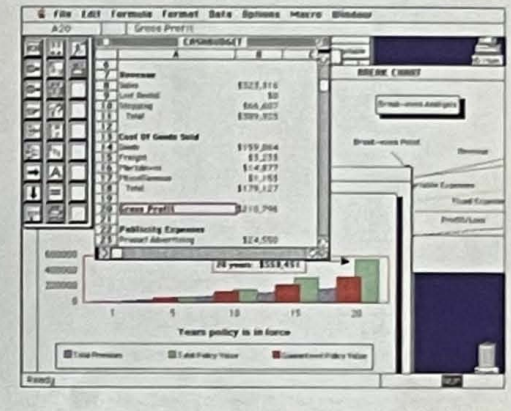
Miami — Targeting users for whom icons are the essence of the Mac interface, Tactic Software last month released an updated version of Icon-It!, a combination desk accessory/Startup document (INIT) that can put a customizable icon bar into virtually any Mac application.

The program, now priced at $89, lets users select menu commands, fonts, Fkeys, DAs or macros (created with another utility) by clicking on a custom-designed or preset icon.

With the new Version 2.0, up to 30 icons can be placed in a horizontal or vertical bar or a multirow grid for each application. The upgrade — the first since Tactic bought the program last year from Olduvai Corp. of South Miami, Fla. — also adds a help system that makes it easier to discover the function of a forgotten icon.

The package ships with predesigned menu bars for more than 100 popular applications, plus a scrapbook with 125 icons.

Tactic Software is at 11925 S.W. 128th St., Miami, Fla. 33186; (305) 378-4110; (800) 344-4818. □



Tactic Software's Icon-It! Version 2.0, shown here installed in Microsoft Excel, lets users add a horizontal or vertical icon bar or grid to any Mac application. Icons can be associated with menu commands, macros, fonts, Fkeys or desk accessories.

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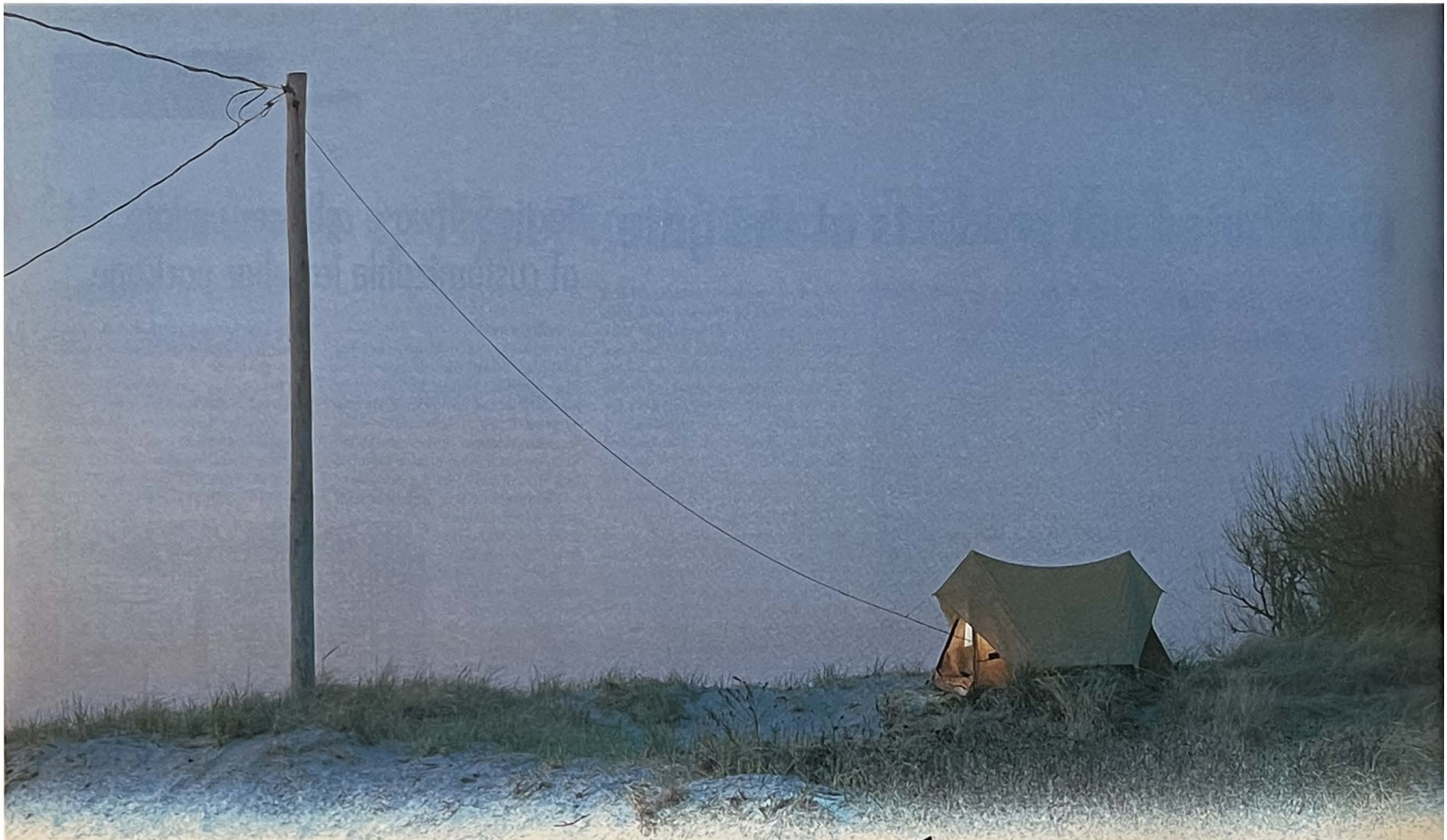

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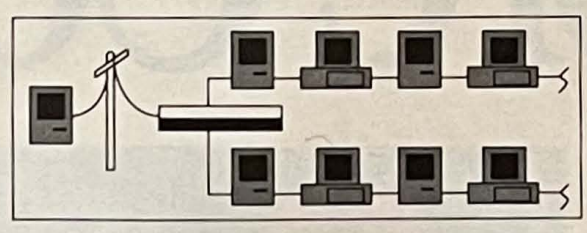

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Action! on stage at SCOOP-West

Show highlights OOP products

By Daniel Farber

Santa Clara, Calif. — ExperTelligence Inc. of Goleta, Calif., introduced its Action! Developer System for the Macintosh II series at SCOOP-West (Seminars and Conference in Object-Oriented Programming) here earlier this month.

Previously available on the Macintosh in the Apple and Texas Instruments microExplorer LISP environment only, Action! is a graphical object-oriented interface builder. It is integrated with a Common LISP incremental compiler that includes the Common LISP Object System.

The new Mac version, which requires a minimum of 5 Mbytes of RAM, includes the Action! interface design tool, Procyon Common LISP and a Mac Toolbox interface.

The Action! Developer System sells for $3,000, which includes free telephone and electronic bulletin-board technical support. The Action! interface builder is sold separately for $795 but requires Procyon LISP and the Toolbox interface.

Other companies demonstrated their object-oriented programming products at SCOOP:

▶ TGS Systems of Halifax, Nova Scotia, demonstrated Prograph 1.2 Editor/Interpreter, an object-oriented visual programming environment. The company plans to release Version 2.0, which will include a compiler and support for more Mac Toolbox calls, in April.

In addition, according to the company, the compiler will ship with a project manager that will allow users to manage source and object files created with Prograph, resource editors, Symantec Inc.'s THINK C 4.0 and 3.0, and Apple's Macintosh Programmer's Workshop (MPW) C and ASM. "You'll be able to switch among the different applications, update object code, and link together applications from all these sources," said Jeff Waltcher, TGS president.

▶ Digitalk Inc. of Los Angeles exhibited Smalltalk/V Mac Version 1.1, which sells for $199.95.

▶ ParcPlace Systems Inc. of Mountain View, Calif., showed Objectworks for Smalltalk-80 Version 2.5, available for $595.

▶ Zuniq of Montreal demonstrated Imager, a Smalltalk/V image manager. The $99.95 program provides an application browser, version management, program documentation support and code profiling.

▶ International Meta Systems Inc. of Torrance, Calif., demonstrated MAX2, a coprocessor card optimized for Smalltalk/V.

▶ SoftPerf Systems Ltd. of Nashua, N.H., showed AM/ST 3.0, a $129.95 application manager for Smalltalk/V. The program includes a code documentation template, alternate views of application methods and classes, execution flow summary reports, and version management. A $195 version works with International Meta Systems' MAX2.

▶ Symantec Inc. of Cupertino, Calif., demonstrated THINK C 4.0, which includes a class library based on object-oriented programming.

Apple highlighted its object-oriented application framework,

The Action! palette, which pops up at a click of the mouse in the editing mode, contains the 13 basic objects of the standard Mac user interface.

MacApp 2.0B9, and MPW C++ Version 3.1B1, Apple's implementation of the emerging industry standard for object-oriented C defined by AT&T's C++ Release 2.0. □

MAX2 70-mips coprocessor card speeds Smalltalk

By Ric Ford

Torrance, Calif. — International Meta Systems Inc. has released a NuBus coprocessor card with a special computing engine that runs Smalltalk programs, among others, as much as 10 times faster than a standard Mac II does, according to the company.

The MAX2 card, which the company said can execute 70 mips, starts at $6,195 for a 35-MHz version with 4 Mbytes of RAM. A custom version of Digitalk Inc.'s Smalltalk/V programming language lists for $495.

The MAX2 processor sports an unconventional architecture that represents neither traditional CISC (complex instruction set computing) nor RISC (reduced instruction set computing). The company calls the approach WISC (writeable instruction set computing).

WISC uses a proprietary 62-instruction, 32-bit processor communicating over its 120-Mbyte-per-second buses to microcode and context memory (with 64 Kbytes each of static RAM) and a 25-Mbyte-per-second bus that connects a four-channel dynamic RAM controller and peripheral adapters. The architecture optimizes the speed of micro-coded instructions, such as the company's Smalltalk interpreter, executing two instructions per clock cycle, International Meta Systems said.

The company also sells microcode development software, supported by special debugging features in the hardware, for customizing the board for special applications. Future plans include support for other object-oriented and compiled languages.

International Meta Systems Inc. is located at 23842 Hawthorne Blvd., Suite 200, Torrance, Calif. 90505; (213) 375-4700. □

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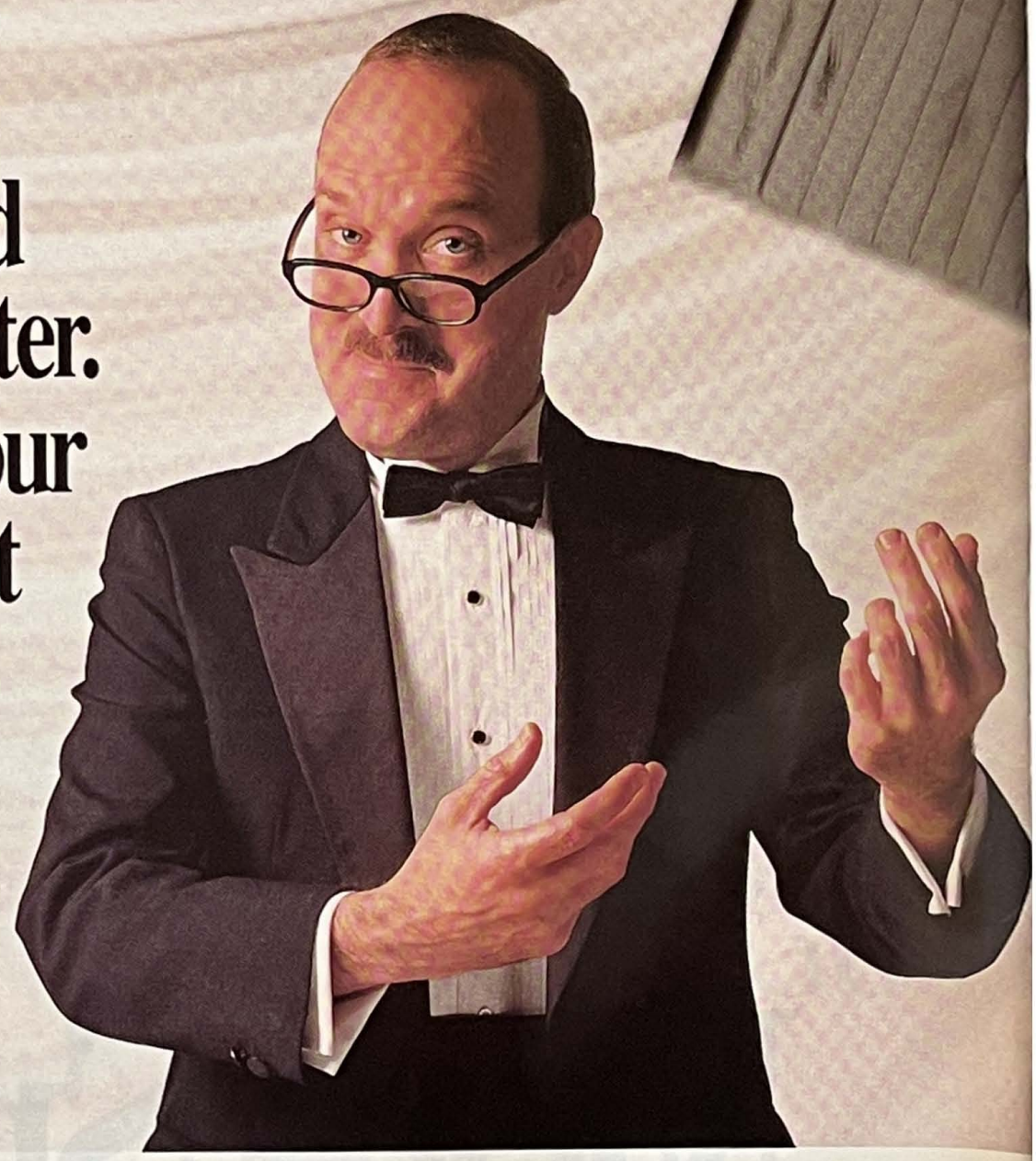

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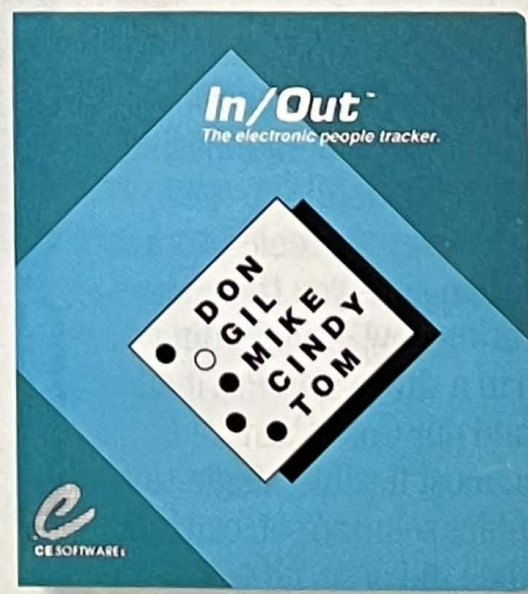

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New Media STEVE ROSENTHAL

An exploration of ABC News InterActive's 'Martin Luther King Jr.'

In honor of Martin Luther King Jr.'s birthday, I borrowed ABC News InterActive's "Martin Luther King Jr.," a combination videodisc and HyperCard set that recounts and analyzes King's life and legacy. Having seen demonstrations of the disc, I was eager to explore what a major news organization could do with an interactive medium.

Unfortunately, I hit a snag: It seems that for each video player, you need a special serial cable. Just because a cable will run with a modem or an ImageWriter doesn't mean it has the right connections for a video player. Furthermore, the cable included in the ABC box didn't run with a Sony LDP-1550, even though the stack's video player test function — which should have trapped this problem — reported that everything was OK.

Museum on a disc. Once I had borrowed the right Sony-specific cable, I was pleased to find that the product was well worth the effort. Like wandering through a museum exhibit with a million doors and passages, exploring this disc was fascinating, thought-provoking and involving.

As with a museum experience, however, the disc isn't going to appeal to everyone. ABC, which is targeting this project for school use, is distributing it through Optical Data Corp. of Warren, N.J.

A more recent disc about the major earthquake that hit Northern California last October (which is out as a disc but still waiting for interactive stacks) will be targeted to home viewers. As such, it will be sold in video stores and distributed by The Voyager Co. of Santa Monica, Calif., which already has a line of Macintosh-supplemented consumer videodiscs. An ABC disc about AIDS, acquired immune deficiency syndrome, also is in the works. Executive Producer David Bohrman told me that as far as ABC is concerned, interactive discs are an ongoing business and not just a one-shot experiment.

King's life. I won't attempt here to argue the facts of King's life, although the disc does include discussions of his more-controversial activities and statements as well as the nearly canonized aspects of his life, such as the "I Have a Dream" speech. While most footage comes from news reports and documentaries, the disc provides a broader range of information than you would get in any single day's TV newscast.

As might be expected from a major TV network, the video clips range from just good to stunning — what you would see on broadcast television rather than the more-limited video that characterizes most desktop productions. Most of the clips have accompanying transcripts in the stack, supplemented by stills and maps on the videodisc.

Flexible editing. The stack that comes with the disc generally works well. You can wander through the clips and documents at a Browse level, or you can drop down to a Documentary Maker level, where clips and documents from a complete list of all the sequences and stills from the disc may be assembled. You can edit the starting and ending points of each clip and add your own transcript. But with a videodisc, of course, you can't add your own clips or recorded audio.

What the stack needs, however, is better error checking and logical consistency. Although intended for industrial video players that read back location information from the disc to the Mac, the stack doesn't notice if you've chosen to explore side one but put the disc in the player on side two.

Organization could be a lot better, and the use of mixed topics and tools within an icon bar is somewhat bizarre. The stack disappeared a few times, so there may still be a few anomalies. But if you don't like it, you can change it. The scripts are open, and Bohrman said he expects that other companies will write their own front ends to some of the ABC discs. That would really make the process interactive. □

Send tips and comments to Steve Rosenthal, c/o MacWEEK, 301 Howard St., 15th Floor, San Francisco, Calif. 94105; AppleLink: Steve R., MCI: 144-8611.

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Letters

Red Ryder gave him an offer he could refuse

GORDON STUDER

No sooner had I taken off my blaze-orange parka upon return from a semidangerous outing into the Allegheny Mountains with the Beaver County Gun, Rod and Bloody Mary Society than I found out that I was under fire in your Dec. 5 Letters column. I'd like to share a few truths regarding Red Ryder Enterprises Inc.'s letter, "Another chapter in the Red Ryder series," with your readers.

I would never have signed my original contract with Red Ryder Enterprises had I known it would lead to a royalty based on a percentage of the "retail sales price" of each copy sold. After contract renewal negotiations, I understood that we had extended the license for another five years at the same annual rate. When Red Ryder Enterprises changed its mind and insisted on a percentage-based royalty, I counteroffered with a flat-fee proposal that was 10 times the amount of our original contract; it was turned down.

Red Ryder Enterprises made an offer to renew the license under terms and conditions I thought were heavily weighted in its interests. I don't harbor any bad feelings; I simply chose not to accept the offer.

I had several conversations with Red Ryder Enterprises, and after deciding that I couldn't resolve the royalty questions personally, my lawyers exchanged calls and letters with the company. I can't understand Red Ryder Enterprises' statement that I never had the courtesy to get back to the company.

I don't know what "proper business protocol" is in Beverly Hills, Calif., but declining an offer is still considered well and proper here in Beaver Falls, Pa.

Scott Watson, president
The FreeSoft Co.
Beaver Falls, Pa.

How about a Claris-like spin on the Apple II line?

The Apple II family has enough problems without having to endure cheap shots like your editorial, "How Apple can fend off circling vultures" (MacWEEK, Jan. 16). You state that the "low-end [Mac] problem has been compounded by Apple's indecision over *how* and *when* to phase out the Apple II."

OK, one more time: The Apple II is not a threat to the Macintosh. In many ways, the two families are complementary. Apple IIs and Macs can share peripherals, and suitably configured Apple IIs can coexist on AppleTalk networks. The Apple II installed base (almost 5 million) is positioned in school and home markets that are unlikely to see any penetration by the Mac for reasons of price. Abandoning this market to cheap IBM PC clones will not help the Mac, and it will condemn a generation of young learners to MS-DOS hell. A "low-cost Mac" is an economic illusion. A truly low-cost Apple II is a simple exercise in value engineering that Apple, so far, has been unwilling to implement.

Most of us in the Apple II community believe that the best solution is not to kill off the computer that created the personal computing industry but to fix it. It is time for Apple to spin off the Apple II product line to a separate company (like Claris Corp.), with a mandate to create insanely great products for the home and school market.

Mike Markowitz
Mission Viejo, Calif.

Early Wingz buyer decries charge for new manuals

How much does "free" cost? Ask Informix Software Inc. It's offering those of us who were initial purchasers of Wingz software a "free media upgrade." That means a new disk with some of the inevitable bugs and boo-boos that go with new software corrected.

However, if you would like the new manuals, which correct the inadequacies of the original documentation, that will be $37. These are the manuals now included with the package, which sells for the same price as it did when the early purchasers laid down their money.

It sure does make me want to rush right out and avoid being an early buyer of any new-to-the-market software. Especially if it's from Informix. When questioned about its policies by mail, Informix didn't even offer the courtesy of a reply. It has certainly helped redefine for me the notions of "product support" and "customer relations."

Brian Weiss
Wordsworth
Santa Monica, Calif.

It wasn't nonsense, nay, it was stupidity, of course

I am afraid I must strongly object to your editorial, "Keeping secrets is no service to readers" (MacWEEK, Jan. 23). In said editorial, regarding Apple's implication that the publication in your journal last July of details about the (then upcoming) Mac IIci had impeded its progress into the 21st century, you state, "That, of course, is nonsense."

As one who has devoted many years to artfully cultivating nonsense, silliness and utter absurdity, I am distressed, nay, even a bit shocked that a mere bit of stupid, self-serving linage from Cupertino might be elevated to such a higher status, especially with the offending "of course" casually tossed in as though we might, on any given day, expect such a miracle.

While it's true that, in years past, there were a few souls at Apple capable of an inspired giggle or good gaff(e), it seems to me that if anything is likely to impede the company's progress, it will be just such a continued tendency to rely on past accomplishments, be they along the lines of interface or farce.

Alfonso T. Qwerty
The Mouseketeer Newsletter
San Francisco

SPA defends audits, fines for software pirates

Your Dec. 5, 1989, editorial, "SPA's troubling new anti-piracy tactic," creates the impression that the Software Publishers Association is conducting software audits just to fill its coffers and that payments somehow constitute "hush money." Settlements from SPA suits and corporate audits go into the Copyright Protection Fund, which is used exclusively to fight software piracy. We finance investigations, pay lawyers, produce public service announcements, publish brochures and other educational materials, and we encourage companies to establish anti-piracy policies.

Most companies we audit treat us like consultants rather than adversaries; every corporation we have audited has instituted safeguards to

GORDON STUDER

prevent future acts of copyright infringement. And although the identities of some audited corporations are kept confidential, that point is always negotiated.

SPA tries to conduct its anti-piracy activities in a responsible fashion. We are not interested so much in cash settlements as we are in finding ways to educate users and protect our industry's most valuable commodity — intellectual property.

Kenneth A. Wasch
executive director,
Software Publishers Association

Send letters to MacWEEK, 301 Howard St., 15th Floor, San Francisco, Calif. 94105. MCI: 323-1203; fax: (415) 243-3650. We reserve the right to edit letters for clarity and length.

Editorial

Franco-Prussian alliance at Apple

In September 1988, Apple replaced its formerly hierarchical corporate structure with a flat organization the company said "would enhance innovation and sharpen Apple's strategic focus." It was, the company said at the time, a structure for the "Apple of the '90s."

Last week, a month into the '90s, that structure was dumped in favor of a traditional organization with most units reporting to a chief operating officer. The press release said that the structure will "better coordinate business operations while streamlining day-to-day activities."

It looks like they've got it right this time. The previous format, with four business unit presidents operating independently, too often allowed unwise decisions to be implemented and left no single executive accountable for matters that crossed the boundaries between units.

Between the cracks. Those unwise decisions are easy to enumerate:

▶ In the summer of 1988, Apple bought more high-priced dynamic RAM chips than it needed for future sales, resulting in a decrease in earnings.

▶ That fall, the company boosted prices of Macs across the board, only to be forced into an embarrassing rollback three months later.

▶ No decisions whatsoever have been made about how to handle the declining Apple II business, leaving customers hanging.

▶ As has become apparent in recent months, the Macintosh product line is biased toward the high end and demand is not being met for models at the low end.

All of these problems have to do with communication, or the lack of it, between the business unit that develops and manufactures Macs and those that sell and market Macs. Without one individual responsible for both sides and accountable for these decisions, critical matters have simply fallen through the cracks.

Last week's shake-up doesn't completely solve the problem. The appointment of Michael Spindler as chief operating officer centralizes decision-making and authority in an individual widely regarded as a brilliant strategist.

Several departments, most importantly Jean-Louis Gassée's Apple Products business unit, remain independent of Spindler, however. That is appropriate, considering Gassée's talents and contributions. However, some of Gassée's former functions, including worldwide marketing and manufacturing, have been shifted to Spindler's domain.

With less bureaucracy to deal with, Gassée will better be able to focus on his core research and development responsibility. This may help get products out of the lab and into the marketplace more quickly.

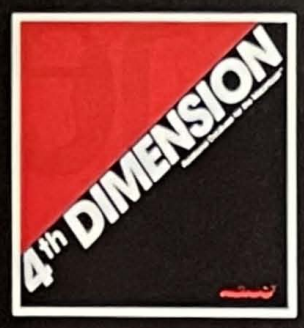
Gassée and Spindler are both Europeans, one French and one German. Customers will benefit if the Franco-Prussian alliance is able to share power gracefully rather than compete for it.

Fall guy. One aspect of the shake-up doesn't ring true. Allan Loren, who resigned his position as Apple USA president last week, appears to have been made the scapegoat for Apple's recent stumbles. Loren may not have been a popular figure around Apple headquarters, but it is too easy to assign all the blame to him.

Ultimately, the responsibility for Apple's performance, both before and after last week's changes, resides with CEO John Sculley. Loren may have been wrong for the Apple USA job, but Sculley was the one who put him there.

For Sculley's sake, and for the sake of all Mac users and members of the Apple community, we hope his choice of executives is the right one this time. □

Version 2



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- Oval
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- Lines

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- Rulers
- Dials
- Radio buttons
- Radio pictures
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- Highlight buttons
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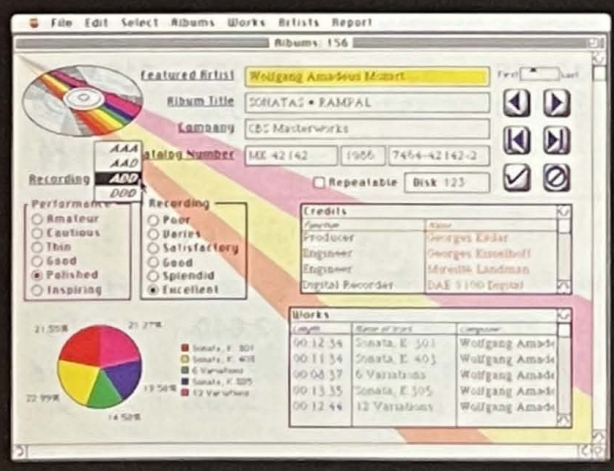

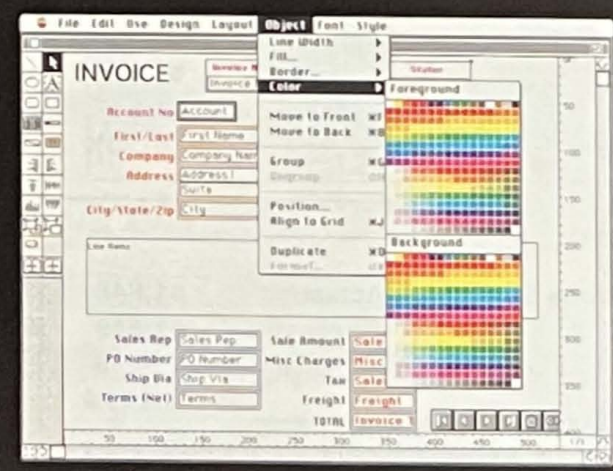

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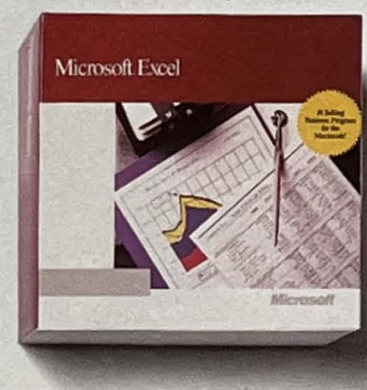

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	Variance	$1,947	$3,500	$3,850	($760)	$1,000	$2,400
	%	130%	140%	138%	92%	108%	113%
Cost of Goods Sold	Actual	$1,848	$3,198	$3,475	$2,262	$2,860	$7,663
	Forecast	$1,549	$2,288	$2,312	$1,608	$2,640	$3,969
	Variance	$299	$910	$1,164	$654	$220	($3,969)
	%	119%	140%	150%	141%	108%	0%
	Gross Profit	$6,552	$9,102	$10,425	$6,438	$10,140	$21,300

WxC 1000

		JUL	AUG	SEP	OCT	NOV	DEC
Revenue *(In Thousands)*	Actual	$2,184	$3,198	$3,892	$2,610	$4,030	$5,325
	Forecast	$1,613	$2,200	$2,513	$2,365	$3,000	$4,725

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Now, we've left a lot out in this short discourse, but Microsoft Excel hasn't. So be sure to ask your dealer for a complete explanation of its capabilities. And you'll see how Microsoft Excel will make your job easier and better.

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MEMO:

TO: *Shannon Pitts*

FR: *Peter Cohen*

DT: *November 13th, 1989*

RE: *Presentation to the Board*

In preparation for the annual meeting, I've created a 20-minute slide presentation on our successful entry into the small printer market.

The presentation will explain to the shareholders that, on a basis of sound marketing strategy, reinforced with our knowledge of the printer business at other levels, we have been able to grow from a 2 percent share of market, to 9 percent in 18 short months.

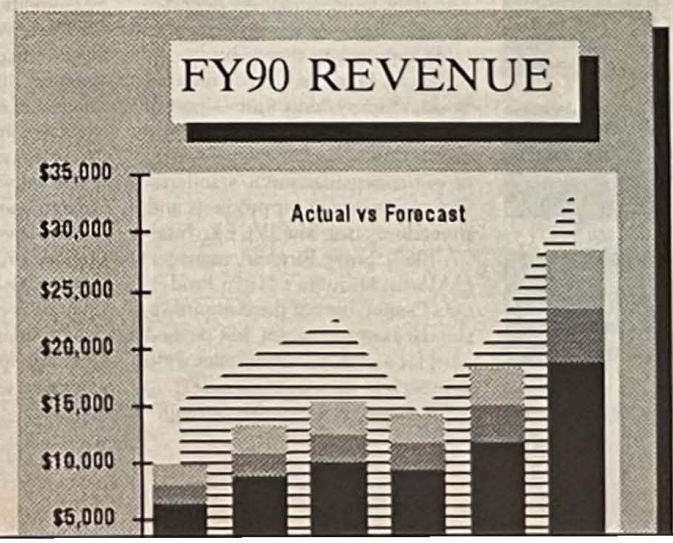
To the right is an excerpt of the presentation which illustrates our growth. Anticipated concerns will probably center around quality of service and the ability to meet market demand over the next year.

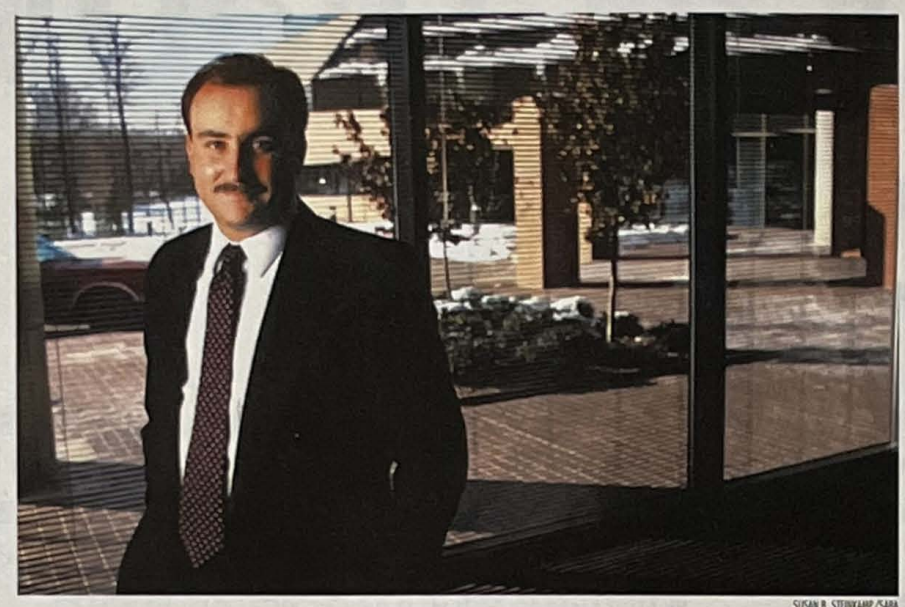
We should be able to squelch any fears by

WxC 2000

	JUL	AUG	SEP
Revenue *(In Thousands)*			
Actual	$8,400	$12,300	$13,900
Forecast	$6,453	$8,800	$10,050
Variance	$1,947	$3,500	$3,850
%	130%	140%	138%

With a very respectable 9 percent share after only 18 months, we feel we can reach 15 percent by the end of the next fiscal year (see six month projection).





SUSAN B. STEINKAMP/SABA

Steve Birgfeld of Martin Marietta has championed a consistent policy toward company upgrades. The process includes evaluation before a product can be recommended for the standard product list.

Simplifying corporate upgrades

Martin Marietta has devised a system to determine if an upgrade is worth the effort.

By Paul Bendix

Upgrading software would seem a simple process, but for corporations it can be surprisingly challenging. What complicates upgrade purchases for large companies is often sheer numbers. To issue upgrades, most vendors demand proof of ownership, such as an original disk or serial number. This is easy for individuals, but when a purchasing department faces the task of validating software ownership for hundreds of employees, it's a different matter.

Filling in thousands of registration cards, for example, is never a popular chore in any purchasing department. And internally distributing upgrade disks to individuals scattered throughout a company can be time consuming at best.

Site licensing may be the obvious remedy for these and other problems, but the concept has few adherents among software producers. Some vendors insist that no one can fully define a "site." They fear that software purchased for a department, a division, a building or a project will soon turn up elsewhere. This seems especially likely in the constantly reorganizing, relocating and resizing world of large companies.

For corporate buyers, site licensing raises complex cost allocation issues. In some companies, department budgets are too small to justify the initial high cost of license fees. Divisions often cannot get departments to agree on a long-term, equitable approach to charge-backs.

Martin Marietta Corp.'s internal information systems unit — part of the company's information systems group — in Chantilly, Va., devotes an entire organization to standardizing microcomputer products and procedures (see MacWEEK, June 27, 1989). Steve Birgfeld, manager of Martin Marietta's Micro Products Center, part of the computing standards organization, has pushed hard for a consistent companywide approach to handling upgrades.

"We manage upgrades through regional Micro Products Centers across the country," Birgfeld said. "Our users move around so much that it's impossible to keep track of who has which version of some particular software. They may not have the latest revision of a package, but they may not need it, and we may not want them to have it."

In this case, "we" refers to much more than Birgfeld's operation. At Martin Marietta, employees volunteer as "experts" in various areas to evaluate hardware and software. Their recommendations determine the company's list of standard microcomputing products.

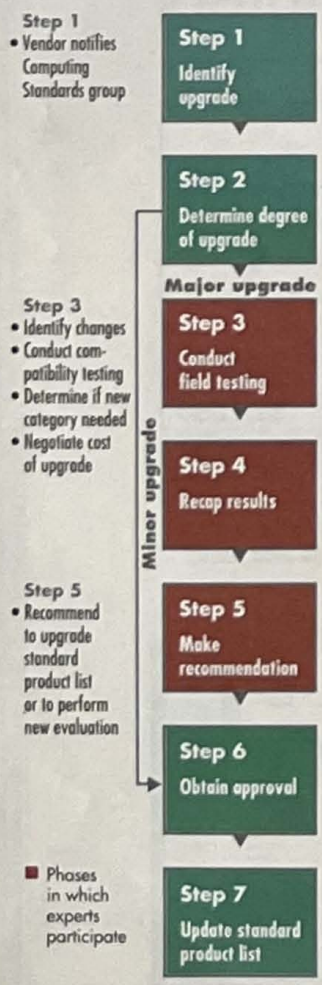
By limiting the types of hardware and software, of course, Martin Marietta saves money in volume purchases. And because employees play a major role in deciding what systems and software they want on their own desks, the company generates grass-roots support for its standard products.

The process. A couple of times a year, Martin Marietta convenes its two technical advisory councils to discuss overall microcomputer product strategies. At a recent gathering of advisory volunteers, Birgfeld related his discussions with software vendors and the results of a survey of technical support staff at the Micro Products Centers. He also proposed a seven-step approach to handling upgrades that the technical advisory councils have since adopted.

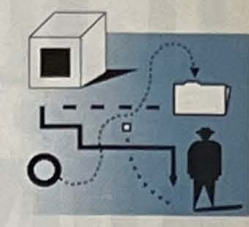
"First, we wanted to simplify the steps it takes to get upgrades to our people," Birgfeld said. "We also needed to establish a way to look at upgrades and consider their impact. There are many implications for a major software revision, and we have to know what they are."

Step one in the Martin Marietta upgrade process occurs when a vendor notifies the company that an upgrade is coming. Birgfeld said that most vendors provide evaluation copies of upgrades well in advance of general announcements. In step

See Upgrades, Page 29



Martin Marietta's upgrade procedure involves seven steps, as shown here.



One-minute MANAGER

Apple Professional Exchange issues call for papers on Mac use

Sunnyvale, Calif. — Do you have a unique idea for using the Mac in a business or academic setting? The Apple Professional Exchange would like to hear from you.

APX has issued a call for entries in its second annual Professional Papers Competition. Manuscripts, which cannot have been published or submitted elsewhere, should be 10 to 20 pages long. Suggested areas for discussion include using Macs in multimedia, hypermedia, databases, artificial intelligence, communications, networking and education.

The top paper will be published in a leading Macintosh magazine and authors of the 15 best papers will receive prizes of software and hardware as well as an all-expenses-paid trip to New York City to attend an awards dinner at the Macintosh Business Conference and Exposition.

Submissions are due March 15.

For more information, see the set of conference rules posted on AppleLink, Connect and America Online or contact APX President Mike Bailey via Connect (TECHPAPERS), AppleLink (NO659) or APX at 370 Altair Way, Box 175, Sunnyvale, Calif. 94086.

MIT installs Origins CAD system

Cambridge, Mass. — Students in the department of architecture at the Massachusetts Institute of Technology here will be using Deltasoft Inc.'s Origins to explore conceptual CAD this spring.

"Origins is the most flexible of all the 3-D programs on the market for conceptualization," said Ed Levine, director of the university's visual arts program within the department of architecture. "Instead of thinking of the computer and the program replicating what they do on the drawing board, students can think of creating 3-D space in the computer."

According to Levine, Origins — which offers interactive 3-D modeling capabilities as well as 2-D drafting — allows students to choose from many design routes. For example, students can start from a 2-D floor plan or from a 3-D representation. "Some CAD programs force you to pretty much follow their routines. Here you can choose from many options," he said.

MIT's lab will include Mac II and IIcx machines, with output options ranging from dot-matrix printers for rough drafts to high-quality color printers. Levine said the department is not "married to the Mac" and that it plans to investigate other CAD platforms.

Deltasoft Inc. can be reached at P.O. Box 55089, Tulsa, Okla. 74155-5089; (918) 250-5594.

Griffin offers CASE support

Palos Verdes, Calif. — Griffin Software Systems Technologies Inc., developer of computer-aided software and engineering (CASE) tools such as DOCgen 2167 and Project Data Manager, provides CASE instruction and integration assistance.

"We offer not only the methodology training, but we also offer CASE tools and on-site contract support with engineering practitioners," said Jolene McClenaghan, president of Griffin. "If you have a specific project and you want to implement CASE methodologies, we can provide tools and training solutions." Training costs run from about $15,000 to $25,000 per project, McClenaghan said.

Griffin offers CASE tools from several other companies as well as its own, including StructSoft Inc. of Bellevue, Wash., and Mark V Ltd. of Los Angeles.

Griffin Software Systems Technologies Inc. is located at 2420 Via Carrillo, Palos Verdes, Calif. 90274; (213) 541-6414.

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The Mac Manager

Don't buy the hard-disk Mac IIci — yet

BY DON CRABB

No matter what you've heard about Apple's problems with the Mac IIci, you haven't heard the half of it. I'm here to tell you that the problems with the IIci are so serious, and the fixes so slow in coming, that I'm advising everyone to stay away from the hard-disk-equipped IIci until Apple gets the problems fixed.

Oh sure, back in October and November we all read MacWEEK's stories about how Apple was quietly extending its 90-day warranty on the IIcx and IIci to many volume buyers because of an abnormally high hard-disk failure rate. Unfortunately, the IIci hard-disk problem is still here — maybe it's even worse than before.

The problem hard disk is the internal Quantum 80-Mbyte ProDrive. This disk is a 3.5-inch drive that's supposed to be renowned for its quiet and reliable operation. But the problems I've been hearing about from around the country point to a staggering percentage of disk failures.

Up to 100 percent of IIci systems delivered to some sites have failed within 30 days. Many of these have failed within the first week. Still others failed during the initialization and system installation phase. All told, the war stories that I'm hearing are pretty bad, and they all point to dud drives from Quantum: drives that won't boot; drives that forget part of the disk contents, then die; and drives that are so twitchy they won't work even with the minimal IIci System software.

To be honest, until you've run headlong into a technical problem like this, your natural tendency is to assume that whoever has reported it has some other problem going on. I call this the "inexperienced user assumption error," or IUAE.

Managers make this error all the time. I mean, after all, computers are reliable, right? Especially Apple computers. Must be my users who screwed up. Unfortunately, I tended to discount a lot of the early electronic-mail reports from the field. I made the IUAE. I just couldn't believe that *that* many IIci Quantum drives could be bad. Then the problem slapped me in the face.

Now I believe.

I ordered two newly loaded Mac IIci systems in November and December. I decided to retire the old Mac IIs in my home and office and replace them with IIci models, since they are so much faster.

Both of my IIci machines came with Quantum 80-Mbyte ProDrives. Both are dead.

One has been repaired under warranty three times. Three new Quantum disks were shoved into it; maybe the fourth time will be the charm? The other has been fixed twice, and it's awaiting a third fix. In both cases, the Quantums died the day I initialized them and ran the System installation scripts.

I take my equipment to the University of Chicago on-campus repair center. (As a member of the Apple University Consortium, the university has an on-campus repair facility.) My Apple repair guy there tells me he thinks all the Quantums he's received in the past two months have died within a week of installation. He said that the problems are usually with the controller and its logic, although other problems have cropped up.

In any case, he's privately advising people at my school to buy their IIci machines with third-party drives.

When an Apple repair person tells me he has no confidence in a piece of Apple equipment, I listen. So, I'm ready to go the third-party drive route. I just hope I can get my money back from Apple for the dead Quantums.

This IIci hard disk problem points out an important lesson to remember during 1990: Our Macintoshes are getting more sophisticated, more powerful and more finicky, but our staffs still expect their new Macs to work like the old Pluses they have retired — only faster.

As we move to higher-speed Macs this year, we all have to figure out better ways to deal with the technical faults this hot new technology will throw our way. Perhaps a good place to start is to fight against the "inexperienced user assumption error." □

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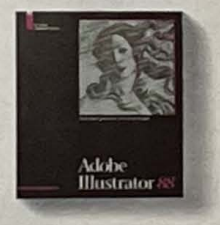

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Upgrades

From Page 26

two, the company's computing standards organization decides if an upgrade should be classified as "major" or "minor."

"If the vendor has simply fixed some bugs or added a handy feature with no inevitable cost impact, we call it minor," Birgfeld said.

Technicians in Martin Marietta's product lab test the upgrade and publish a fact sheet on it. The fact sheet describes the minor improvements and recommends that people get the new version if they are having trouble with a bug in the previous version or if they really need an added capability.

"There's a lot of promotion around upgrades," Birgfeld said. "We know that people's expectations can get built up. We try to present the facts on the new version in clear, functional terms. When an upgrade is clearly a major one, we move the process on to the next step. For example, in the Macintosh environment, I'd predict that one of the next upgrades of presentation packages will be major."

Evaluating the upgrade. In step three, Martin Marietta's experts make a full-scale evaluation. Using the results of its own lab tests, the computing standards organization develops test criteria. It incorporates these in a score sheet that it sends to each expert, along with sample copies of the upgrade.

During the next few weeks the experts assess the program's major changes, examine compatibility and try to determine the upgrade's business impact. Their responses give the computing standards organization enough information to negotiate pricing or take a fresh look at the product category.

"A significant upgrade can shake up a whole market," Birgfeld said. "When a product really changes, it doesn't matter whether it's on our standards list. We usually have to take a look at it. As a result, we may decide to reexamine the whole category. We may redefine our categories altogether. In computing standards, we try to keep the focus on objective criteria. The ultimate decisions rest with the experts and the technical advisory councils."

Recommending a course of action. In step four, the computing standards organization summarizes the results of the tests. Based on the information it gathers from the experts, it issues a recommendation (step five). At this point, the options are simple: Recommend adopting the upgrade in the standard product list or begin a new evaluation of competing packages on the market.

Birgfeld described the impact of the recent upgrade to Version 3.0 of Lotus 1-2-3 for IBM PCs and compatibles. His organization tested the upgrade and noted major compatibility issues. These included obvious points, such as the need for a '286-based platform and expanded memory. The organization's report also explained that existing macros and add-ons would not work with the upgrade and that some of Martin Marietta's Zenith machines were not compatible with it. After their look at the new Lotus package, the experts convinced the technical advisory councils to launch a major evaluation of other spreadsheet products.

In step six, the councils either approve an upgrade or, following an evaluation, recommend another product in the same category. Then, in step seven, the company updates its standard product list. At that point, it provides information on the upgraded software, including the source, pricing with options, features, requirements and evaluation reports.

Delivering the software. Birgfeld recently got approval from the councils for measures to speed and simplify getting upgrades to users. He described his progress with the company's largest software vendors:

"We met with our major software suppliers and asked them to adopt the same upgrade procedure in dealing with us," Birgfeld said. "We told them we wanted to minimize proof of purchase. We don't want to return original floppy disks. We don't even want to supply serial numbers, if we can avoid it. But we will sign a letter promising to issue upgrades only to bona fide users and to destroy their old disks. And for vendors with a persistent fear of upgrade abuse, we'll provide proof of ownership within 30 days of purchase.

"Virtually all vendors have been accommodating," he said. "No one's insisted on proof. But they have let us know that they're worried that customers will purchase upgrades at discounted prices and issue them to new users. Of course we've promised not to handle new users this way. That would violate everything we're trying to do. Basically, the issue here is trust."

Having used his company's clout with vendors, Birgfeld has begun talking to dealers. His mandate from the technical advisory councils is to sign a contract with a major software dealer that will handle most upgrade logistics. The dealer will notify users, keep records on registration and user whereabouts, deliver products, and generally save the Martin Marietta purchasing departments many hours of labor.

"Dealers can't revise upgrade policies," Birgfeld said. "Only manufacturers can do that. We want to establish uniform procedures with our major vendors, then let the dealer take it from there. This will simplify upgrades, contain costs and make the best use of everyone's skills." □

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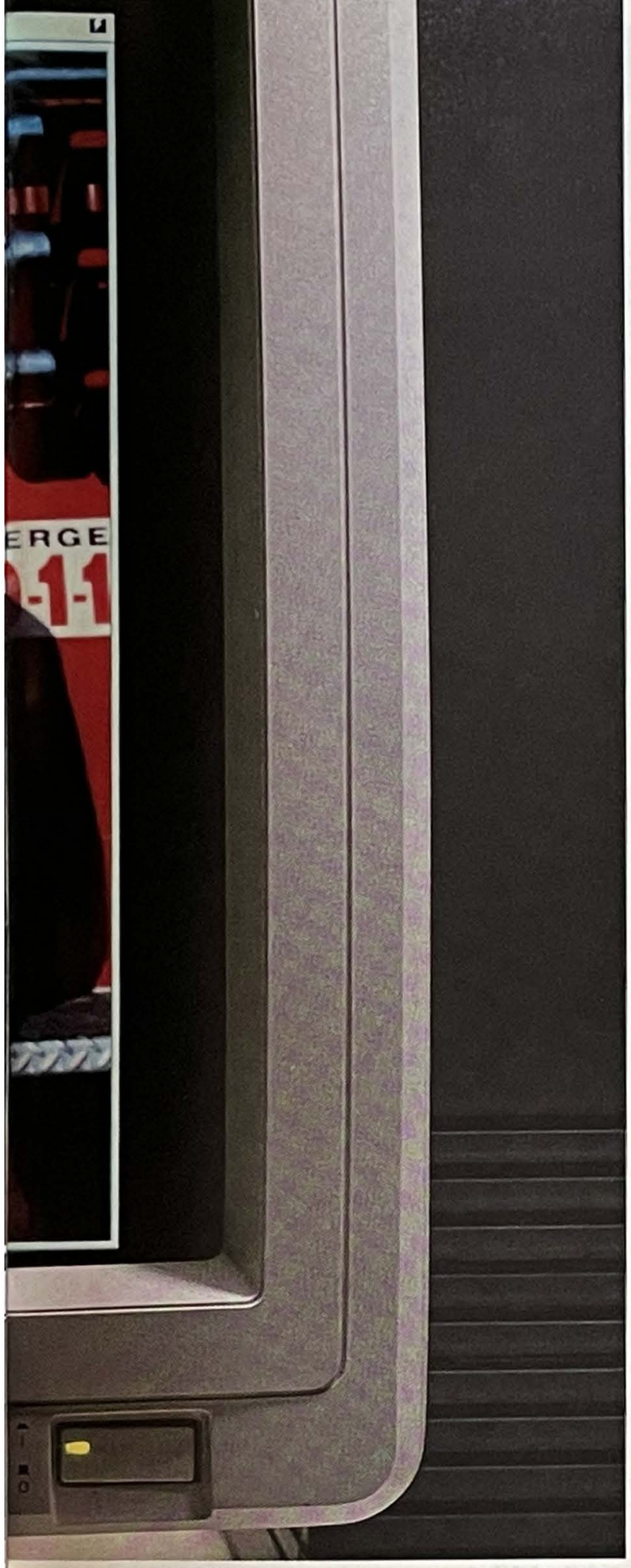

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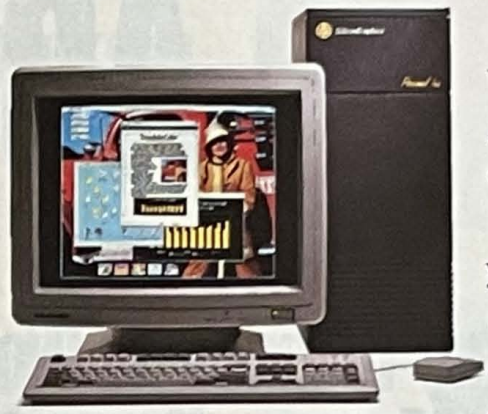

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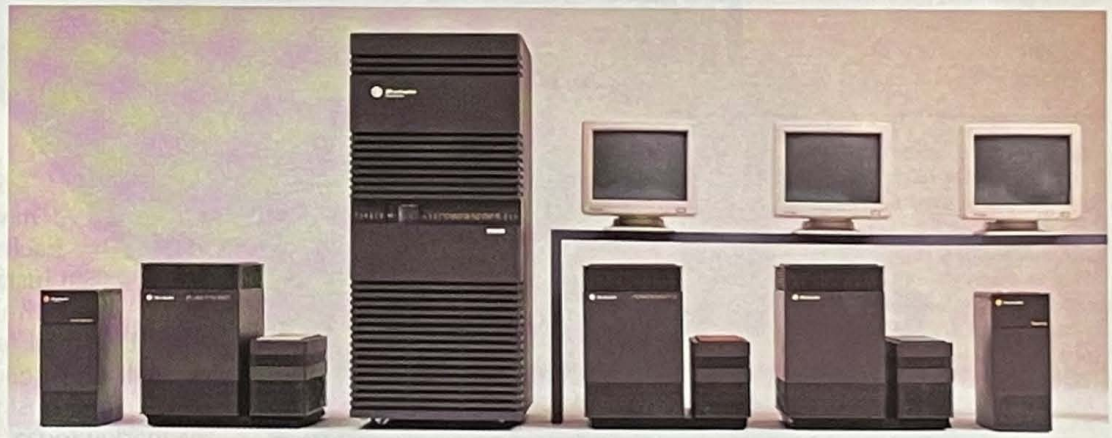

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COMPARISONS

Low-cost color reaches desktop

MacWEEK examines three inexpensive color scanning solutions.

By Mary Jane Westland

While Mac color scanning used to be strictly a big-ticket affair (see MacWEEK, Sept. 19, 1989), three low-cost solutions are now available that give dedicated color scanners a run for their money: Microtek Lab Inc.'s MSF-300Z color and gray-scale scanner; Sharp Electronics Corp.'s JX-100 color hand scanner; and Colorset, software and color filters from Studiotronics Inc. that work with existing flatbed gray-scale scanners.

All three of these relatively inexpensive color scanners require a color Macintosh system with a hard disk and at least 2 Mbytes of RAM (4 Mbytes are recommended). A color monitor with a 24- or 32-bit video card will display the best-looking images, but all these systems also will work on an eight-bit color system running on a 32-bit QuickDraw operating system.

Color filter principle. These products all use the same color filter concept in the color scanning process. The Microtek and Sharp units have built-in red, green and blue (RGB) filters that are positioned automatically during the scanning process. Colorset requires that the user position the filters before each scan. In all three processes, three gray-scale scans are made, one with each of the color filters in place. The final color image is then recombined from the separate scans by adding hue (color) back to the filtered scans. The quality of the three gray-scale scans and the amount of control the user has over brightness and contrast settings have a major effect on the quality of the final color image.

Microtek's MSF-300Z. The MSF-300Z is a stationary flatbed scanner with a maximum scanning area of 8.5 by 14 inches and maximum resolution of 300 dpi. Its light source is a single fluorescent bulb and the scan head uses a charge-coupled device (CCD) sensor. When scanning in color, the scan head makes three passes over the original image, one for each RGB component. The scan head makes a single pass when scanning in monochrome.

The MSF-300Z's Mac interface kit includes the MS-SCSI/G SCSI interface as well as scanning and editing software. Bundled software includes the Microtek B&W DA, a desk accessory for black-and-white and gray-scale scanning; the Microtek Color DA for color scanning; and scanning modules for Digital Darkroom from Silicon Beach Software Inc. of San Diego and ImageStudio from Letraset of Paramus, N.J. Bundled editing software includes SuperPaint 2.0 from Silicon Beach; Digital Darkroom 1.1; and PhotoMacEdit 1.12 from Avalon Development Group of Marlboro, Mass.

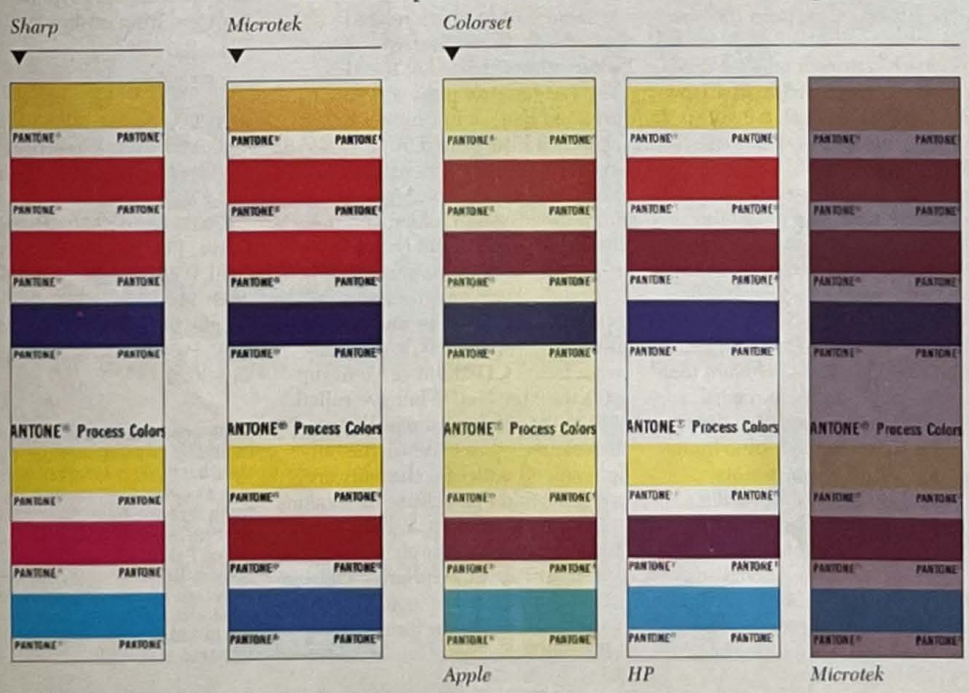
SCSI cables are not included in the Mac interface kit. The MS-SCSI/G returns a SCSI connector, so you can daisychain other devices from the interface. The SCSI interface ships with neither external nor internal SCSI termination. Microtek supplies four resistors so the user can add internal SCSI termination if desired. Unfortunately, the device's SCSI ID also is set internally. Thankfully, the SCSI interface manual contains very clear instructions.

The Microtek Color DA scans only in color mode, at eight bits per RGB component. Black-and-white or gray-scale scanning is available with the Microtek B&W DA or with the scanning modules for Digital Darkroom and ImageStudio.

Images can be previewed before scanning and the actual scanning area can be preset, which saves disk space and scanning time. Color also can be corrected before scanning by adjusting the brightness of each of the RGB components in 3 percent increments. It is possible to dim the components as much as 18 percent or to brighten them as much as 21 percent. The Microtek Color DA cannot correct color in an image once it has been scanned.

The Microtek Color DA scans images to disk, so image size is limited only by available disk space. Resolution settings range from 75

See Comparison, next page



TRENDS

Hand-held color scanners: Not just a pretty price tag

By Scott Beamer

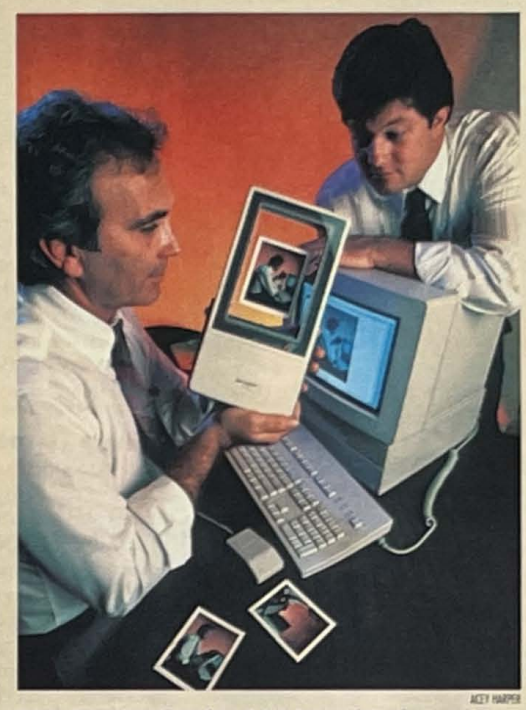
Hand-held color scanners at first glance may look like novelty products, more fit as gifts for the executive who shops at Sharper Image than as real tools. A closer look shows that hand-held color scanners have clear advantages over flatbed scanners, despite trade-offs in image quality.

A price less than $1,000 is certain to attract buyers for these products, but prices for flatbed color scanners also have dropped dramatically recently (Microtek Lab Inc.'s MSF-300Z 24-bit color scanner is priced at $2,695). But price is not the only consideration. Convenience also carries importance.

For many, the hand-held scanner appears certain to change the way color scanners are used with the Mac. Previously, the high price and relatively large amount of work space needed for a flatbed color scanner meant that most offices had only one unit, which was placed in a central location. Hand-held units may mark the coming of personal color scanners. Users can store their hand-held scanners conveniently and unobtrusively next to their Macintosh.

However, hand-held scanners do not perform well all of the tasks handled by flatbed scanners. The small image size and the potential for distortion make optical character recognition one problem area, as is capturing images to be used in electronic publishing. Flatbed scanners are at the lowest edge of quality for use in professional pre-press work, and hand-held scanners won't do at all. However, for low-end desktop publishing and presentations, hand-held scanners may be more than adequate. Thus, the choice between hand-held and flatbed scanners comes

See Trends, Page 38



ACEY HARPER

Robert Bacon, president of the R & D Group (shown here with a client who is operating the 200-dpi Sharp JX 100), said that he frequently uses resolutions of 200 dpi or less because higher resolutions tend to bring out imperfections in the ink, characters or paper.

Comparison *From previous page*

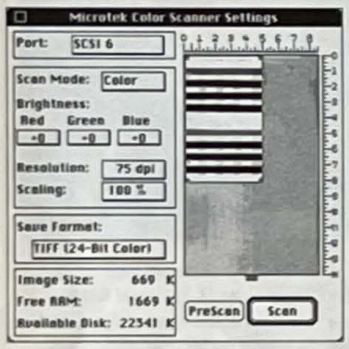
dpi to 300 dpi, in increments of about 15 dpi. Scaling factors can be set from 25 percent to 400 percent. The chosen resolution affects the range of scaling factors available: At 75 dpi, scaling factors of 100 percent to 400 percent are possible; at 150 dpi, scaling factors range from 50 percent to 200 percent.

Images are saved in either PICT (eight-bit color) or TIFF (24-bit color) format. When saving in PICT format the user has a choice of paint or desktop publishing formats. PICT Paint, which maps the image to the screen dot for dot, is most useful for color paint programs. PICT DTP is suggested for use with page-layout software, displaying the image with its correct dimensions, regardless of the resolution of the scan.

PhotoMacEdit has all the color editing features of PhotoMac, except for its color separation capability. Images scanned with Microtek Color DA can be opened in PhotoMacEdit and edited. File formats supported are PICT (eight- or 24-bit color) and TIFF (24-bit color).

PhotoMacEdit uses a virtual memory system, allowing it to work with very large color images. It requires a minimum of 2 Mbytes of RAM and enough disk space to store and manipulate a given image. Up to three temporary copies of the image are created during an editing session, so the disk space required depends on the size of the original file.

PhotoMacEdit works with 24-bit full color information, but displays only 256 colors at a time, based on a customized color palette. During the work session, the color palette is optimized for the portion of the image being viewed.



Although you can quickly prescan to set image area and scaling with the Microtek Color DA, what you see is only gray scale.

Sharp JX-100. The JX-100 is a portable flatbed scanner with an effective scan area of 3.93 by 6.29 inches and a maximum resolution of 200 dpi. The JX-100's light source is a fluorescent bulb, and it uses a CCD sensor. The scan head makes three passes for color scanning and a single pass for monochromatic scanning. The JX-100 uses an RS-232C high-speed serial interface, but scans slowly compared with SCSI devices.

The JX-100 operates on the same principle as a full-sized flatbed scanner, in the sense that the original image lies flat on a glass bed

See Comparison, Page 39

A comparison of color scanning software

	Microtek	Imagenesis	Studiotronics
Software	Microtek Color Desk Accessory 1.0	Chromascan 100 1.0	Colorset 1.2
Price	Bundled with Microtek MSF-300Z	Bundled with Sharp JX-100	$399.95
Hardware requirements for color scanning & viewing	Any Mac II or SE/30 with hard disk & minimum 2MB RAM, 8- or 24-bit color video card & color monitor	Any Mac II or SE/30 with hard disk & minimum 4MB RAM, 8- or 24-bit color video card & color monitor	Any Mac II or SE/30 with hard disk & minimum 2MB RAM, 8- or 24-bit color video card & color monitor, flatbed gray-scale scanner
File formats	PICT2 (8-bit color), TIFF (24-bit color)	PICT2 (24-bit color)	Reads gray-scale TIFF, PICT2; outputs PICT (8-, 16- or 24-bit color), color TIFF, or gray-scale TIFF
Scanning modes	8- or 24-bit color	1-bit or 8-bit monochrome; 8-, 16- or 24-bit color	View & save image in 8-, 16- or 24-bit color
Preview	Gray scale, not interactive	Gray scale, not interactive	N/A
Select scan area	Drag bounding box handles	Drag bounding box or specify width & height in inches	N/A
Resolution	75 to 300 dpi	20 to 200 dpi	Cannot change resolution of scan
Scaling & scale increment	25% to 400%, range & increment depending on chosen resolution	10% to 100%, 0.01% increment	25%, 50%, 100%, 200%, 400% if saving image as PICT
Scan file size limited by	Available disk space	Available RAM	Available RAM
Color palettes supported	Standard Apple	Standard Apple, custom, user defined	Standard Apple
Color correction features	Brightness for each RGB component before scanning	Before scanning: contrast, brightness, exponential correction overall; tint for each RGB component	Brightness & contrast for each RGB component before & after file is saved in combined color format (PICT only)
Scan time comparison*	1:00	Fast Scan on: 4:32; Fast Scan off: 11:47	2:17

** In minutes:seconds. Scan times are given for a typical image and do not include preview and setting time. Similar settings were used in each case.*

In summary: Low-cost scanners

We reviewed three low-cost color scanning solutions that each use software to extract color from three gray-scale passes of the original material. The Microtek and Sharp are hardware/software solutions; Colorset is a software-only product that can be used with a variety of existing scanners.

The Microtek MSF-300Z is easy to set up and operate. It has a standard SCSI interface, but the ID number can only be set internally. The full-size scanner comes bundled with monochrome and color scanning and editing software, including plug-in modules for Silicon Beach's Digital Darkroom and Letraset's ImageStudio. The software scans to disk, so scan size is not limited by available memory. A major drawback is that brightness and contrast cannot be adjusted before scanning in gray-scale mode.

The Sharp JX-100 hand scanner is easy to set up, but because of its serial interface it takes much more time to complete a scan than does the Microtek. Its image area is limited to about 4 by 6 inches, and scan file size is restricted to available memory. To its credit, the Sharp has a sideways scan feature that allows for image rotation during a scan, and the bundled ChromaScan software can be used with full-sized flatbed scanners for larger images.

Results with the Sharp are almost as good as with the Microtek, and its software lets you make tonal adjustments before scanning. For small images or infrequent scanning needs, the Sharp, at less than half the cost of the Microtek, is a good choice.

With the Colorset software, image quality is dependent on the scanner and scanning software used. We found acceptable results were achieved with the HP ScanJet and very poor results with the Microtek scanner. The software comes with plastic color filters that are delicate. Damage to the filters will adversely affect the quality of the scanned images.

In general, we found that Colorset was not a good price or performance value when compared with the other products.

MacInTouch

RIC FORD AND RICK LEPAGE

The SID Trio's do-it-yourself sound system

BUGS & TIPS

The sounds of SID. There is now an alternative to commercial sound digitizers for the Macintosh: SID (Sound Input Device). From Eric Gould, Jeffrey Siegel and Dave Fleck ("the SID Trio") comes a schematic for building your own digitizer with less than $20 worth of electronic parts. A sample application is included in the kit, along with software source code and libraries for incorporating the digitizer into your own programs. The kit is available free from on-line services and users groups.

SID appears to be very similar to Farallon's MacRecorder in hardware capabilities, with a built-in microphone and a frequency limit of 11 kHz. Power is supplied by the Mac serial port.

The SID package lacks the powerful software of MacRecorder, and it is clearly a project only for experienced electronic hobbyists. However, the SID Trio's stated goal is to "increase the installed base of sound input devices," and we would not be surprised to see small companies spring up to sell the digitizer for less than $100.

Sound files created by SID are compatible with standard Macintosh formats, so existing applications should be able to manipulate them. The SID Trio's software toolbox boasts the ability to record sound files to disk and play them back from disk without time limits imposed by RAM constraints.

We doubt that MacRecorder 2.0 will soon be replaced, and SID is no competition for the compact-disc quality of Digi-Design's $1,000 AudioMedia digitizer, but it is an interesting experiment that could help raise the Macintosh's lowest common hardware denominator.

KEVIN BERGER

System 6.0.4/IIci update. We have been compiling reports on compatibility problems with Apple's System 6.0.4 and the Mac IIci. While most applications work satisfactorily, a few bugs persist.

Some problems are related specifically to the System software, while others are tied to the IIci. The IIci has problems with any program that cannot run with Apple's 32-bit QuickDraw installed. While users with other Macs can remove the Apple INIT from their System folder, IIci users are stuck, since 32-bit QuickDraw is present in the machine's ROMs.

Some other problems and fixes:

▶ Apple recently announced the release of Version 3.0 driver software for its CD-ROM drive to support the Mac IIci. When we called APDA (Apple Programmer's & Developer's Association), the only announced outlet for the software, we were told that release of Version 3.0 has been held up and may be as late as the end of March.

▶ If you use InfoSphere's Liaison networking software, you'll need Version 2.0.5 or later for compatibility with the IIci. The upgrade also addresses problems with the Mac Portable.

▶ A Microsoft patch for Works 2.00a is available in the MSAPP forum on CompuServe as well as on other networks. The patch, which raises the version level to 2.00b, is solely for IIci compatibility.

▶ Claris Corp.'s MacWrite 5.0 runs under System 6.0.4, but the spelling checker does a good job of cleaning up documents by deleting all of the text as it checks a file! Since Claris has discontinued MacWrite in favor of the superior MacWrite II, it is strongly urging users to move up. MacWrite 5 users can upgrade for $65 and owners of earlier versions of MacWrite can get MacWrite II for $75.

▶ Macsbug 6.0 does not work with the IIci. Version 6.1 is available from APDA (with documentation) and from on-line networks.

REFERENCE

APDA, Apple, 20525 Mariani Ave., M/S 49A, Cupertino, Calif. 95014; (408) 562-3910; (800) 282-2732.

Claris Corp., 5201 Patrick Henry Drive, P.O. Box 58168, Santa Clara, Calif. 95052-8168; (408) 987-7000; (800) 544-8554.

Infosphere, 4730 S.W. Macadam Ave., Portland, Ore. 97201; (503) 226-3620. □

We welcome comments at MacWEEK, 4 Cambridge Center, Third Floor, Cambridge, Mass. 02142; (617) 497-2600; (617)497-2646 (fax). Electronic mail: CompuServe: 75410,2612 (Ric Ford), 76117,1765 (Rick LePage); GEnie, America Online, Delphi, PAN: MACWEEKBOS; Connect: RICKLEPAGE, RICFORD; AppleLink: (address to "MacInTouch" in Subject): MACWEEK; Internet: MACWEEKBOSTON@MCIMAIL.COM; MCI Mail: MACWEEKBOSTON.

COLOR SCANNING FROM BLACK/WHITE SCANNERS

Using Colorset, a color Macintosh and almost any gray-scale flatbed scanner, color images (photos drawings...) can be scanned with remarkable quality.

A set of three custom filters used with a gray-scale scanner extracts red, green, and blue information from any color image. Colorset then creates a beautiful, full color composite 8, 16, or 32 bit image. The image can be enhanced and manipulated with Colorset's comprehensive set of image editing tools. The image can be saved as a PICT or TIFF file for incorporation into image processing, desktop publishing, stackware, and desktop media applications.

Colorset Requires:

Color Macintosh System
Minimum of 2 MEGs of memory
Gray-scale flatbed scanner

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1035 S. Semoran Blvd.,Suite 1031
Winter Park, Florida 32792

***Suggested Retail Price* $399.95**

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For more information about Colorset, the affordable, high quality, solution for color scanning, please call: 1-800-780-3825

STUDIOTRONICS℠ Inc.

Everybo

The envelopes have all been opened, and *MacUser* magazine has lauded the Macintosh products listed at right* as the best newcomers in their respective categories.

Congratulations to the companies who have put considerable time, effort and forethought into raising the standards of excellence for the Macintosh format.

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So don't delay! Visit your local supplier now and check out these great products wherever you see the Eddy Award window display.

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Congratulations To The New 1989 Eddy Award Winners

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The Design and Drafting Software That *Thinks*

Sugg. Ret. $995

Microtek MSF-300Z ColorGray Scanner/*Best Image Digitizer*

The Affordable Color/Gray Scanner

Sugg. Ret. $2,195

Storage Dimensions MacInStor Erasable Optical Disk/*Best Storage System*

The Newest & Fastest Storage Technology

Sugg. Ret. $7,995

Layered atOnce!/*Best Accounting Package*

The First Seamlessly Integrated Accounting Package

Sugg. Ret. $395

DataViz MacLink Plus/*Best Connectivity/ Networking Software*

Transfers Between Most Popular Mac and DOS Files

Sugg. Ret. $199

Caere OmniPage/*Best OCR Package*

Scans & Recognizes Most Any Page, No Matter How Complex

Sugg. Ret. $795

Informix Wingz/*Best Spreadsheet*

Powerful Spreadsheet With Top-Flight Graphics

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Symantec SAM/*Best Anti-Viral Program*

Finds and Destroys All Known Viruses

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Emerald City TypeAlign/*Best Typographic Product*

The Desk Accessory That Commands & Customizes Type

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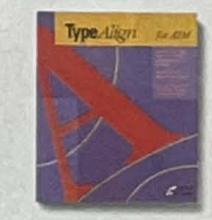

MacroMind Director/*Best Animation Program*

Multimedia Software That Sets Ideas In Motion

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Bringing Adobe PostScript Quality to QuickDraw Printers

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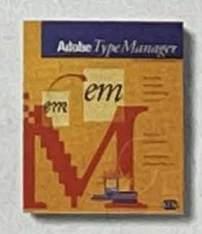

Dantz Retrospect/*Best Backup Software*

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Paracomp Swivel 3D/*Best 3D Graphics Program*

Ideal for "Working" On-Screen Models and Smooth Animation

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Acius 4th Dimension 2.0/*Best Database*

Ideal for Novice, Intermediate and Power Users

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*This is a partial list of 1989 Eddy Award Winners.

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Trends

From Page 33

down to which factor is more important — convenience or image quality.

Small may be better. Three companies offer hand-held color scanners. From Sharp Electronics Corp. comes the JX-100, capable of scanning an image up to 4 by 6 inches at up to 200 dpi, with a maximum of 18 bits per pixel of color information. The ClearScan from National Computer Ltd. and the MyScan from Accel Computer Corp. are identical in both hardware and software. They scan a 2.5-by-5-inch image at 90 dpi, with 12 bits per pixel of color information.

At first glance, these specifications may look too anemic for work in the real world, but the resolution, color depth and image size limitations of hand-held color scanners may be irrelevant for some tasks.

Robert Bacon, president and owner of the R & D Group of Ft. Lauderdale, Fla., said he frequently uses resolutions of less than 200 dpi because they give a cleaner image. "Higher resolutions tend to bring out imperfections in the ink, characters or paper," he said. Although Bacon has other color scanners in his office, he said he often finds the Sharp JX-100 the most convenient when putting together color images for his clients to include in desktop-published brochures that will be printed on 300-dpi color thermal printers and for images in slide and overhead transparency projects that require less than photo quality.

More than a handful of data. Although they capture less data than flatbed scanners, image files created with hand-held color scanners are still large enough to create problems.

"You don't want to bring in more color data than you need," said Terry Thrift, a programmer at Imagenesis of San Antonio, Texas, the company that developed the ChromaScan software provided with all Sharp color scanners. Color file sizes are large. Even with a hand-held unit, injudicious settings can produce an impossibly huge image. For instance, if you set the Sharp JX-100 to its maximum settings, a 4-by-6-inch image at 200 dpi with 16 bits of color information will require a Mac with 8 Mbytes of RAM to capture the image.

So, as with large color files captured by flatbed scanners, working with these files requires an investment in RAM and mass storage as well as costly video display cards that can put more than eight-bit color on screen.

Only color separations and color slide output require more color information and resolution than it is possible to get from hand-held color scanners.

How they work. The ClearScan and MyScan scanners provide what one would expect of a hand-held scanner: The user pulls the scanner across the image to be scanned. This can frequently result in image distortion caused by imperfect tracking of the scan head by the user. While users can learn to minimize this distortion with practice, it may be a problem. For instance, pasting together multiple images seamlessly can be very difficult.

Because the scan head in the JX-100 is moved across the image by an electric motor, it does not have the distortion problem. It is relatively easy to paste multiple scans from it together. However, the JX-100 has a surprising limitation of its own. With the JX-100, the image can take several minutes to appear. In a worst-case situation, the delay can be more than 20 minutes.

The major cause of this extremely slow performance is the unusual way the scanner is connected to the Mac. While all other color scanners for the Macintosh attach through the SCSI port or a NuBus slot, the JX-100 connects through the modem port. This is a much slower way to pass data into the Mac. Mark Albanese, product manager for graphics products at Sharp, said that this choice allows the JX-100 to be marketed at a substantially lower price than would have been possible with a SCSI connector. He also said that using the modem port lets the JX-100 work with Amiga and IBM microcomputers.

What's next? In the near term, look for continued evolution in color hand-held scanners. As production volume and competition increase, expect to see technical improvement, lower prices and even more convenience. Sharp may develop a NuBus card for the JX-100 and introduce software that accesses the 400-dpi resolution built into the hardware. Eventually, ClearScan and MyScan will be available with higher resolution and a 4-inch scan head, according to Accel.

As with flatbed scanners, hand-held scanners will benefit from the introduction of System 7.0, with its virtual-memory capability. More memory, even virtual memory, will improve speed and permit the scanning of larger images at higher resolutions. In the same vein, advances in color compression techniques also will help make the handling of color images more feasible. Convenience will be improved as more developers of Mac graphics packages include direct access to hand-held color scanners. □

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Kodachrome
The beautiful reproduction you're looking at is the direct product of electronic publishing. Surprised?
The photo is by Andrew Unangst, renowned for the graphic beauty of his work. The unprecedented resolution of this page is by the Nikon LS-3500 Film Scanner, soon to be renowned for the graphic beauty of its remarkable, high definition detail and color fidelity.
Unangst worked with a Nikon F3. The LS-3500 worked with a Mac® II. But any MS-DOS® or UNIX®-based system would have been equally adept.
The original was a 35mm positive. But a 35mm negative, color or monochrome would have worked brilliantly, too.
The crisp enlargement is the result of a scanning resolution that's far superior to any previously possible. A precision Nikon lens was conceived specifically for the task. The scanner has resident intelligence so operation is effortless. And our proprietary color separating software can be used easily by your receptionist and creatively by your Da Vincis. All with unmatched precision, control and economy.
The machine is about half the size of a Mac. And goes for about what it now costs you merely to compose film seps for a couple of ads just like this one. But then, they could never be quite like this one.
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Sharp's ChromaScan software scans only to available RAM, so the memory indicator is vital (near right).

Comparison

From Page 34

and the scan head passes across it. However, the original image lies face up and the scanner is laid on top of it, which means that the JX-100 is upside down. Registration is critical during the three passes in color scanning. The scanner and original must not move during the scan process. To scan 3-D objects or bound pages, you can flip the JX-100 over and lay the original on the glass scan window facing down.

The original image is aligned by viewing through the scan window and squaring up the scanner. Markings on the bottom scan window show the limits of the effective scan area and aid in alignment.

ChromaScan 100 scanning software from Imagenesis is bundled with the JX-100. Scanning modes are one-bit black and white; eight-bit gray scale; and eight-, 16- and 24-bit color. The scan resolution can be set in fractional values from 20 dpi to 200 dpi. The scaling factor can also be set in fractional values from 10 percent to 100 percent. ChromaScan only scans to memory, so image size is limited by available RAM (4 Mbytes of RAM is the minimum).

Apple's standard color palette and custom color palettes are supported in eight-bit mode. Custom palettes allow you to tailor the color look-up table so that an image's eight-bit color display will be more pleasing. However, not all applications support custom color palettes, so you may not be able to take advantage of this feature. ChromaScan's dithering option also smooths screen display in eight-bit color mode.

ChromaScan's preview function eases scanner setup. The Tone Control Panel gives you control over contrast, brightness, exponential correction and tint during the scanning process. The program's manual includes a good discussion of these functions, but experimentation is still required. Custom scan settings can be saved for later use.

ChromaScan cannot modify an image once it has been scanned, so all adjustments must be made beforehand. The color images created by ChromaScan can be edited in programs such as PhotoMac or ColorStudio from Letraset.

PICT2 is the only file format supported for saving images. Output size can be specified in pixels or inches. Pixel mode, similar to Microtek's PICT Paint format, maps the image to the screen dot for dot. The other mode, similar to Microtek's PICT DTP format, displays the image with its correct dimensions, regardless of the resolution of the scan.

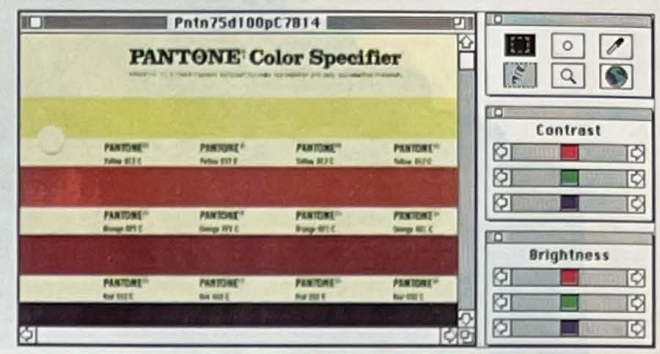
Colorset. The Colorset package includes a software application and a set of color filters that together allow you to obtain color images from flatbed gray-scale scanners. You must scan in gray-scale or halftone mode, and your scanning software must be able to save in TIFF format.

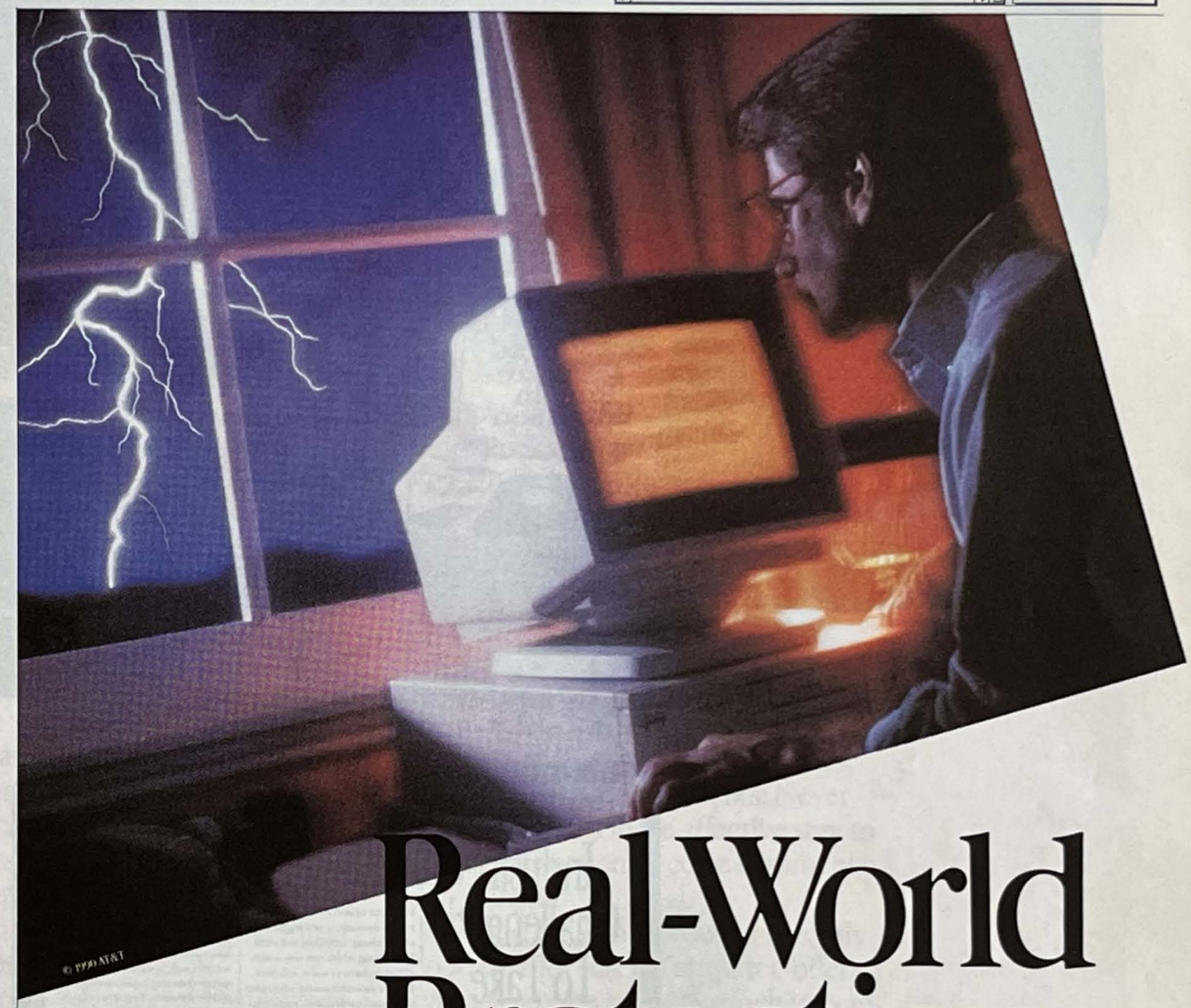
The scanning procedure is simple but not automatic. First, tape the original image down to the scanner. Next, scan the image three times, each time with one of the color filters between the image and the scan head. Then launch Colorset to combine the three gray-scale images into a single color image.

For the best image quality, you must compensate for the darkening effect of the color filters by adjusting brightness and contrast before the three gray-scale images are created. Colorset includes suggested settings for calibrating Hewlett-Packard Co.'s ScanJet

See Comparison, Page 42

Studiotronics Inc.'s Colorset software includes easy-to-use brightness and contrast sliders as well as several image-editing tools (see right).





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In this far from perfect world, not every surge-suppressing device gives you the protection you need from electrical power line distortions. The surges and "spikes" that can destroy or shorten the life of your high-tech equipment. That's why an AT&T Surge Suppressor is a low-cost investment in complete protection. Because only AT&T gives you solid-state architecture, AT&T Bell Laboratories engineering, UL-approved circuitry, and a thermal cut-off feature to disconnect power before it becomes hazardous. Plus the reliability assurance of the company with a century of experience in AC and telephone line protection. For the location of your nearest AT&T dealer, just call 1 800 638-7978.

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PART IV SOLUTIONS

Industry Challenged To Take Role In Education

As we have seen, the inadequacy of the U.S. labor force is reaching crisis proportions. The average literacy level of today's young adults is below the average level needed by the job market. In the next ten years, the job market will demand an ever higher level of proficiency in reading and math. Many young adults with only a high school diploma or worse, will effectively be shut out from the job market as demand for unskilled, manual labor jobs decreases. This ever growing segment of the population will become a drag on the economy due to increased unemployment.

Corporations can ill afford not to try and remedy this situation, for if they do not, they will not have a satisfactory pool of job applicants from which to choose the workers to fill the positions which will develop in the next several years. The jobs will have to be filled by unqualified, undereducated workers. This will create lower productivity and thus a lower standard of living across the board. This, of course, has worldwide implications as well, adversely affecting U.S.

Sponsor curriculum development

As corporations assess key skills required over the next several decades, they should cooperate with high schools and junior high schools to develop programs that breed interest and proficiency in these areas. Corporations can even sponsor extracurricular activities such as science, computer or speech clubs that would reproduce real-life situations. Exposure, experience and excitement about the field can grow together.

Reward those who graduate

Corporations can offer guaranteed part-time employment to students who agree to remain in school and pursue courses preparing them for careers in their chosen field. Students perceive an incentive to stay in school and to experience a variety of disciplines.

Support employee involvement in school activities

Corporations should encourage executives to spend time with students in the classroom. The man-hours forfeited would be repaid many times over. For students, school becomes a more interesting environment with clear attachments to the outside world. At the same time, the company builds a close relationship with young people with room

"THE BEST COMPUTER FOR PUBLISHING EVER MADE."

The words are those of Jonathan Seybold, perhaps the most respected voice in desktop publishing. His newsletter, The Seybold Report, reaches some 200,000 publishers–of whom we estimate 199,990 have never even tried a NeXT™ Computer.

Certainly, then, Mr. Seybold's words weren't calculated to gain favor among his readers. We suspect a far simpler motive: honesty.

The NeXTmachine has caused many to believe that it was designed exclusively for publishing. Not a bad theory, considering the evidence.

To begin with, the NeXT Computer is the first pure PostScript® machine. You can work on-screen with the hundreds of fonts in Adobe's type library. You can output to any PostScript device, be it laser printer, slide maker or the highest quality professional typesetter. And what you see on the display is precisely what will print.

As the rest of the industry explores ways to accomplish this feat, in a year at best, only the NeXT Computer can do it today.

In addition, the quality of the image itself is raised dramatically.

The NeXT MegaPixel Display provides a huge workspace, with sharpness and detail you haven't seen on a computer before. The NeXT Laser Printer, at 400 dots per inch, offers over 75% greater resolution than the current 300 dpi standard.

Ours is also the only system to offer optical storage as a standard feature. A single optical disk (256 megabytes) lets you store and transport multiple versions of long documents, rich in graphics–along with expansive libraries of fonts and art.

The NeXT Computer streamlines the entire publishing process. FrameMaker® software combines writing, graphics and layout tools in one publishing package. Which brings an end to the tradition of forever bouncing between programs, "importing" and "exporting" as you go.

And, thanks to true multitasking, you can instantly access other applications.

The NeXT Digital Library,™ for example, is always at hand. It includes entire books, such as Webster's Ninth New Collegiate Dictionary® and Collegiate® Thesaurus. Or archives of your past work, in which you can pinpoint text or graphics in seconds, to copy into new documents.

NeXT Mail makes publishing a truly collaborative process. Unlike ordinary e-mail, it lets you send and receive messages that include text, graphics, voice, even entire documents. Never has there been a more effective way to locate information, receive comments and get approvals.

And, as Publish! magazine recently reported, the NeXT Computer "offers a staggering price advantage" when compared to personal computers configured for desktop publishing.

To receive our publishing brochure, call 800-848-NeXT. While you're on the line, ask for the location of your nearest Businessland Center. There, you can get some hands-on experience with the world's most sophisticated desktop publishing system.

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Comparison

From Page 39

Plus, the Abaton Scan 300/S and 300/GS, Xerox Datacopy's Grayscale scanner, and the Apple scanner with their bundled software. Also included are guidelines for calibrating other gray-scale scanners. Microtek scanners do not allow brightness and contrast adjustments when scanning in gray-scale mode, so the resulting Colorset images are less than satisfactory. We got the best results with the HP ScanJet Plus (see illustrations, Page 33).

Colorset allows you to create and modify images in either eight-bit palette mode, or non-palette mode (16- or 24-bit data). Color editing is much faster in palette mode than non-palette mode.

Editing tools include an eyedropper for picking up and editing individual colors, a pencil for drawing and a brush for selecting color ranges or portions of the image to edit with the color correction tools. Brightness and contrast can be adjusted for each RGB component of the selected colors or image areas. Images can be edited after they've been opened in color or after they've been saved in PICT format (Colorset cannot open color TIFF files).

The final image can be saved in PICT (eight-, 16- or 24-bit color), color TIFF, or gray-scale TIFF. When saving in the gray-scale mode, TIFF turns a four-bit gray-scale scan into an eight-bit image. An image scanned on a four-bit scanner will only contain 12 bits of color data, even though Colorset will save it in a 16-bit data structure.

Also included in the Colorset product is an external command, ShowScan, for installation in HyperCard stacks. Once installed, ShowScan can be invoked from a script or message box to display a Colorset PICT image.

Conclusions. If you're in the market for a full-size gray-scale scanner and you also need to scan color images, the Microtek MSF-300Z is a good, reliable choice. For $500 more than Microtek's MSF-300G eight-bit gray-scale scanner, you can have full color capability. Setup and operation are easy. The bundled color scanning software does a good job scanning at its default settings and allows for adjustments before scanning. With the bundled editing software, images can be manipulated further after they've been scanned. We wish that the MSF-300Z allowed brightness and contrast adjustment in the gray-scale scanning mode.

If you need to scan color images smaller than 4 by 6.5 inches, and you can live with the speed of a serial interface, the Sharp JX-100 is a good choice. Setup is even easier than with the Microtek SCSI device, and operation is simple and straightforward. Its resolution and scaling capabilities don't match the Microtek's, but they are adequate for many applications. ChromaScan also does a reasonable job of scanning at its default settings, and it allows even greater flexibility in color adjustment before scanning than Microtek's Color DA. However, scan size is limited by available RAM.

If you already own a flatbed gray-scale scanner you might want to consider Colorset. With Colorset, we were not able to produce images of the same quality as those scanned with the Microtek and Sharp scanners at their default settings. Colorset's editing tools were also not capable of manipulating these images to the same quality as the Microtek and Sharp.

Studiotronics is working on an upgrade that will include direct scanner control and greater control of brightness and contrast settings than most scanner software now allows. This new version should improve image quality, but we question the value of this product at its current price. □

Mary Westland is a graphic artist, trainer and writer working in Southborough, Mass.

The process color reproductions of the Pantone standards shown in this article may not match the solid color standards. They are for illustrative purposes only.

Product Info

ACCEL COMPUTER CORP.
MyScan: $799 with SCSI connector, $590 without SCSI connector
Von Karman Commerce Center, 17145 Von Karman Ave., Suite 110, Irvine, Calif. 92714; (714) 757-1212

MICROTEK LAB INC.
MSF-300Z: $2,695 (scanner body: $2,195; Mac interface: $500)
680 Knox St., Torrance, Calif. 90502; (213) 321-2121

NATIONAL COMPUTER LTD.
ClearScan: $695
1221 Innsbruck Drive, Sunnyvale, Calif. 94089; (408) 734-1006

SHARP ELECTRONICS CORP.
JX-100: $995
Sharp Plaza, Mahwah, N.J. 07430-2135; (201) 529-9500

STUDIOTRONICS INC.
Colorset: $399.95
Lakeview 436 Office Park, Building 2, 1031 S. Semoran Blvd., Winter Park, Fla. 32792; (407) 657-0677

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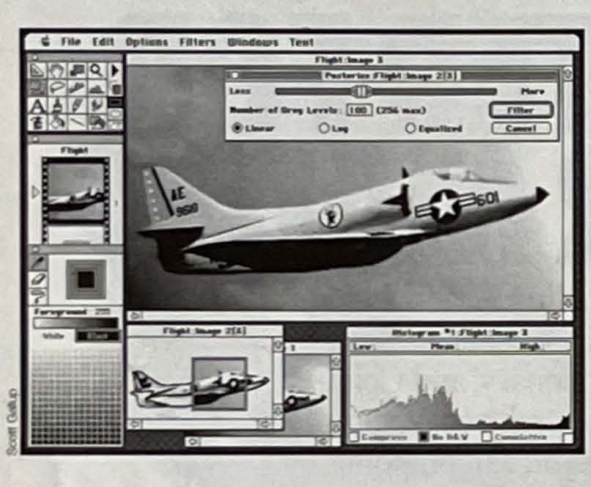

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MacWEEK
New Mechanical Specifications.

Effective with the March 6, 1990 issue of MacWEEK, vertical trim dimension will downsize by 3/8". The vertical trim size changes from 13-15/16" to 13-1/2". The width of the publication remains the same. Look for new Mechanical Specifications mailing by January 22, for all additional changes.

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11" x 13-3/4"
Tabloid Spread
20-3/4" x 12-11/16"
Tabloid Spread Bleed
21-3/4" x 13-3/4"
Junior Page
7-3/8" x 9-7/8"
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PLI, Infinity Turbo	–	–	569	$20	619	**$26	–	–	–	–	1098	$21
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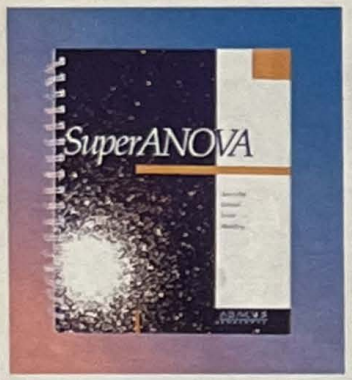
REVIEWS

SuperANOVA speeds GLM building, testing



SuperANOVA 1.01

Abacus Concepts Inc.
List price: $495

+ Highly interactive statistical modeling package; good use of Mac interface; good presentation capabilities; fast on a Mac II; complete documentation.

− Some early-version rough edges; inflexible graphing; some confusion over intended audience.

By Vernon Keenan

Scientists and engineers need numerical tools to analyze the observations they make during experiments. SuperANOVA, a new product from Abacus Concepts Inc., the makers of Statview II, is an extremely interactive Macintosh program that tries to meet this need in a flexible manner.

ANOVA stands for analysis of variance. It is a numeric tool that correlates the variation of one variable in an experiment with another variable. A variety of tests in ANOVA allow the researcher to find out if the variation of one variable is significantly affected by another variable.

SuperANOVA puts these tools together in a package that allows a statistician to flexibly create and present a general linear model, or GLM, of how a variable behaves for any particular data set.

Installation, documentation. SuperANOVA is available in two versions, one for the Macintosh II and one for the Mac Plus and SE. The Mac II version takes advantage of the II's faster CPU and math coprocessor chip.

Installation is a simple matter. The program is packaged on two disks; one contains the program and the other contains a code resource, several example models and data sets. The code resources are automatically combined into an application file on the user's hard disk the first time the program is launched. There is no copy protection (beyond encoding the user's name into the program).

The documentation comes in a well-produced spiral-bound manual. It is laid out efficiently, and there are plenty of annotated screen dumps and other types of illustrations.

The manual mainly explains how to use the various features of SuperANOVA. Some information is provided on the basic concepts of general linear modeling, but the manual is not intended to be a statistics tutorial.

The only complaint we have about the manual is that it doesn't define the intended audience. We got the feeling that anyone with experience in data analysis could easily use the program, even if he or she lacked extensive experience with statistics, but the manual fails to specifically guide that type of user on how to get the best use out of SuperANOVA.

Data input and display. Raw data is stored and viewed using a spreadsheet-like window. The data may be typed into the SuperANOVA spreadsheet or loaded from a text file or a Statview data file. Variables may be separated by tabs, spaces or any user-defined character. Small integers may be automatically recoded into categorical values.

The spreadsheet window is split into two portions. The bottom section holds the data in regular cells. The top part has pop-up menus that allow the user to select the variable type, numerical class and display format. Below the formatting information for a column are cells that display univariate statistics, such as the mean and standard deviation, for that column. If the data in a column is changed, the statistics are automatically updated.

SuperANOVA provides a complete facility for recoding variables and calculating derived variables. A pseudo-programming language is provided, so advanced users can create highly complex rules for calculating new variables.

All kinds of analyses. SuperANOVA will perform a wide variety of analyses, including analysis of variance (ANOVA), analysis of covariance (ANCOVA), multiple analysis of variance (MANOVA), repeated measures and multiple regression, among others. We found the analysis capabilities of

See SuperANOVA, Page 54

Reviews in Brief: ADDRESS BOOK PLUS • DYNODEX • MACPHONEBOOK

Phone- and address-list management is a natural application for a personal computer, but surprisingly few programs are available specifically for this purpose. Sure, you can devise your own list manager in HyperCard or practically any database, but a dedicated program has distinct advantages. It's a stand-alone application and doesn't require the overhead of a large program like Claris' FileMaker or HyperCard to run. It may have specialized features like phone dialing or double-sided printing. And data entry and output formatting is already done — you don't have any setup hassles before you start entering your data.

Three useful address-list managers — Address Book Plus 1.0, Dynodex 1.1 and MacPhonebook 2.01 — have appeared on the scene recently, each with its own set of special features and output capabilities. Your choice will depend largely on the degree of sophistication and type of printed output you require.

Address Book Plus 1.0

Power Up Software's Address Book Plus is a full-featured address-list manager that offers a wide range of printed output formatted for looseleaf-bound personal organizers, rotary cards, labels and envelopes. Unlike the other products we reviewed, it doesn't offer double-sided printing, but its range of formats and paper sizes is the most comprehensive and you can specify fonts on a field-by-field basis.

In addition, data entry in Address Book Plus is very flexible, and the program offers many record-management features, including sorting, selecting by criteria, and importing and exporting data in several universal file formats. The program doesn't require a laser printer, and it works quite well with an ImageWriter.

Address Book Plus comes with a desk accessory that lets you search through address files and dial a telephone through the Macintosh's speaker or a modem. Curiously, phone dialing isn't available in the main application, only in the DA, so if you dial a number and then want to modify the record, you'll still have to launch Address Book Plus. This effectively offsets the convenience of having a DA in the first place.

We think Address Book Plus is the most suitable choice if you want to print in the widest variety of formats and need flexible, advanced data management functions. Address Book Plus 1.0 retails for $89.95; a special version complete with a leather binder sells for $129.95.

See Reviews in Brief, Page 46

MicroTV: High-cost TV on a Mac?

Upgrade promises more functionality

By Ric Ford

For $395 retail, you now can choose between many ordinary color television sets and a tiny black-and-white one that fits in a Mac NuBus slot.

MicroTV is the first product to come from Aapps Corp. of Sunnyvale, Calif. It consists of a NuBus card with four connectors, a small audio speaker and an application on floppy disk.

When you hook up one of the connectors to a TV antenna or video signal, the MicroTV application displays a little moving picture on the Macintosh screen while TV sound plays through the speaker.

If you copy using the standard Macintosh procedure, a black-and-white snapshot of the screen is saved on the Clipboard for pasting into other applications. The picture is 128 by 108 pixels (less than 2 inches by 2 inches), with 128 shades of gray.

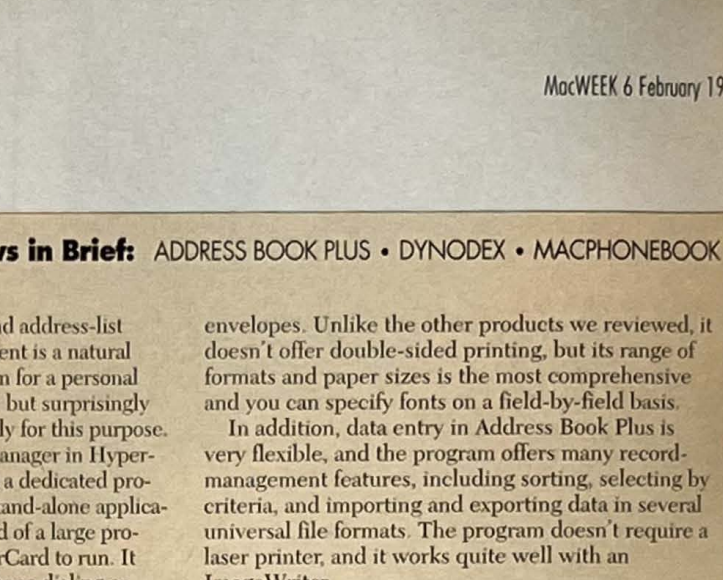
Today's features. Unlike other video products for the Macintosh, MicroTV includes a built-in tuner for converting radio waves into television pictures. The tuner does not decode cable TV signals in this version, but it accepts 98 channels of VHF and UHF signals. The clarity of the picture is not up to regular television standards; instead, it offers a sort of spy-camera quality.

MicroTV

Aapps Corp.
List price: $395

+ Easy-to-capture images; includes full set of controls.

− Black-and-white only; low resolution; no TV antenna included; requires 32-bit QuickDraw.



MicroTV lets users grab frames from TV broadcasts or videos and save them to the Clipboard.

MicroTV's controls cleverly mimic real-world controls, but you can also type a channel number directly or click the mouse to reset an adjustment. A Channels menu can be configured for the TV channels available in your area, and you can type descriptive names for them.

No antenna is included in the MicroTV package, but we had acceptable results with both a simple rabbit-ear antenna and a connection to a VCR.

The input jacks consist of an F connector for radio-frequency signals and an RCA jack for direct video input. A menu allows for switching between them. Two additional RCA jacks provide for the input and output of monaural sound. MicroTV does not make use of the Macintosh's sound circuitry, and no video output is available.

Tomorrow's features. While MicroTV is fun to play with today, a $200 upgrade and a developers kit due sometime this quarter promise more-practical functionality.

The upgrade will boost image quality to what Aapps calls "full VHS resolution" (256 by 216 pixels), although pictures will still be gray-scale only. The developers kit

See MicroTV, Page 46

"The Abaton scanner gave me great definition in just minutes."

Scanned on an Abaton 300/GS

Every issue of my newsletter takes shape easily now that I use the Abaton Scan 300/GS. Because this 8-bit scanner delivers 256 shades of gray. That's 240 more than the 16 shades you get from a 4-bit scanner. And that means each scanned image scan has more tone and better definition.

Abaton doesn't stop there. They make the body of my work easier to publish by adding Letraset's Image Studio software. With Image Studio, I can touch up, change, and rearrange my images so every issue of my newsletter looks as good as the physiques I profile.

If you already have a 4-bit Abaton or Apple scanner, Abaton also offers an 8-bit upgrade. It can be installed in your home or office in less than 30 minutes, without any sweat on your part.

With all these choices, it's easy to get great definition without a heavy workout. If you want to see more, call Abaton at *1-800-444-5321*. And let Abaton make your ideas easier to publish.

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MicroTV

From Page 44

is said to provide documentation; source code in Pascal, C and Object Pascal; and externals for HyperCard and SuperCard.

Compatibility. MicroTV requires Apple's 32-bit QuickDraw software, which is included on the floppy disk. This can cause compatibility problems for some applications, but most vendors should have updates to fix these problems before long.

A Mac display with at least eight bits of depth is required for MicroTV, and color lets you see the fluorescent green of the TV controls and the red power light.

The application works well under MultiFinder, halting temporarily when you're doing something in another application and resuming when it can get processor time again.

The only serious problem we encountered was electrical interference with a Mass Microsystems ColorSpace II board. The MicroTV board created severe distortion on a display connected to the ColorSpace II, making it very unpleasant to use. We had no interference problems with a standard Apple eight-bit video card, but interference could be a problem with certain other cards, affecting either the MicroTV board or its NuBus neighbor adversely.

MicroTV might be worth buying just for fun and for playing with television images, but it cannot replace either a real TV or a full-featured video board.

Quality and support. The number of blue jumper wires soldered onto our MicroTV board indicated that it was barely out of the development stage, but future versions should be closer to the production standards of companies like Apple.

Aapps provides a six-month warranty on its hardware, with an extension to one year if you return the warranty card. We had no trouble reaching technical support on the phone, but it's a toll call.

The MicroTV manual is concise, a little cute and reasonably complete, lacking only a discussion of antenna choices.

Conclusions. At a discounted street price, MicroTV might be worth buying just for fun and for playing with television images, but it cannot replace a real TV or a full-featured video board. The developer support kit and the upgrade package should make it much more useful for applications such as training and presentations, although it will still be restricted to gray-scale images.

In the meantime, the best MicroTV application we can think of is for a Mac-based video security system at Apple.

Aapps Corp. is located at 756 Pastoria Ave., Sunnyvale, Calif. 94086; (408) 735-8550. □

Reviews in Brief

From Page 44

Power Up Software is located at 2929 Campus Drive, San Mateo, Calif. 94403; (415) 345-5900.

Dynodex 1.1

Portfolio Systems' Dynodex automates the entry, storage and printing of name, address and phone records for looseleaf-bound personal organizers. It contains many of the same elements found in full-featured databases: sorting, record selection by criteria, viewing records in a list, and importing and exporting data. You can even dial phone numbers through the Macintosh's speaker or a modem.

Field assignments and lengths in Dynodex are fixed (and quite small), and printing is limited to one font at a time, so it doesn't have the versatility of a general-purpose file manager. What Dynodex offers instead is a fast, well-designed tool to manage names and addresses, plus the capability to print formatted, double-sided address-book pages in several sizes (3.75 by 6.75 inches, 5.5 by 8.5 inches and 8.5 by 11 inches) for personal organizers like Day Runner, Day-Timer, Filofax and Lefax. A laser printer (PostScript or QuickDraw) is required.

Dynodex comes complete with 100 sheets of laser paper — already perforated and with six holes for the 3.75-by-6.75-inch format, for a total of 300 looseleaf pages — and an attractive looseleaf binder for your backup printouts.

Dynodex is an excellent choice if you want to maintain addresses specifically for an organizer notebook, and it offers double-sided printing so your pages will be concise. But we'd still like to see added flexibility in the printed output. Dynodex 1.1 lists for $149.95.

Portfolio Systems is at 158 Flushing Ave., New York, N.Y. 11205; (718) 935-9501; (800) 729-3966.

MacPhonebook 2.01

SYNEX's MacPhonebook is the simplest of the three programs we looked at, providing fewer advanced features for data entry and management. Like the other address list managers, it allows users to import or export data and assign records to user-defined categories. But MacPhonebook doesn't offer searching or record selection by criteria, and its pre-defined fields are fewer and more restrictive.

The program does have its share of relative strengths. Like Dynodex, it has a built-in phone dialer and can produce double-sided output on a laser printer or Image-Writer. It can print in a variety of formats and sizes, like pocket-book, checkbook and timeless little-black-book sizes. The program even comes with several sizes of black vinyl covers into which you can staple your pages. It also offers a unique printing format, the Inhouse Directory, for internal phone lists. But it doesn't support printing for organizer-type notebooks.

MacPhonebook is probably better suited for personal or small-scale record-keeping — it's rather bare-boned and lacks many high-end features business users will want. It may also appeal to those for whom simplicity is paramount. MacPhonebook 2.01 retails for $79.95.

SYNEX is at 692 10th St., New York, N.Y. 11215; (718) 499-6293; (800) 447-9639. — *By Dennis Klatzkin*

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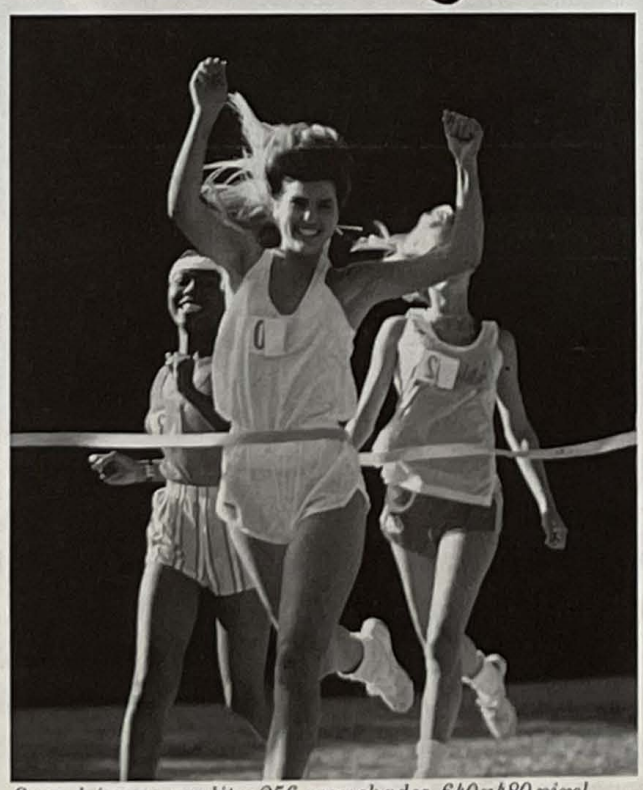

Superb image quality: 256 gray shades, 640x480 pixel resolution, grayscale or halftone, plus posterizing.

The MacVision Video Digitizer is compatible with all the most popular publishing and graphics arts programs, including PageMaker, ImageStudio, MacPaint, HyperCard, Adobe Illustrator, and Cricket Draw. It also has a plug-in module for direct image capture in Digital Darkroom. And MacVision works with Mac SE/30, IIx and IIcx, as well as MacPlus, SE and Mac II.

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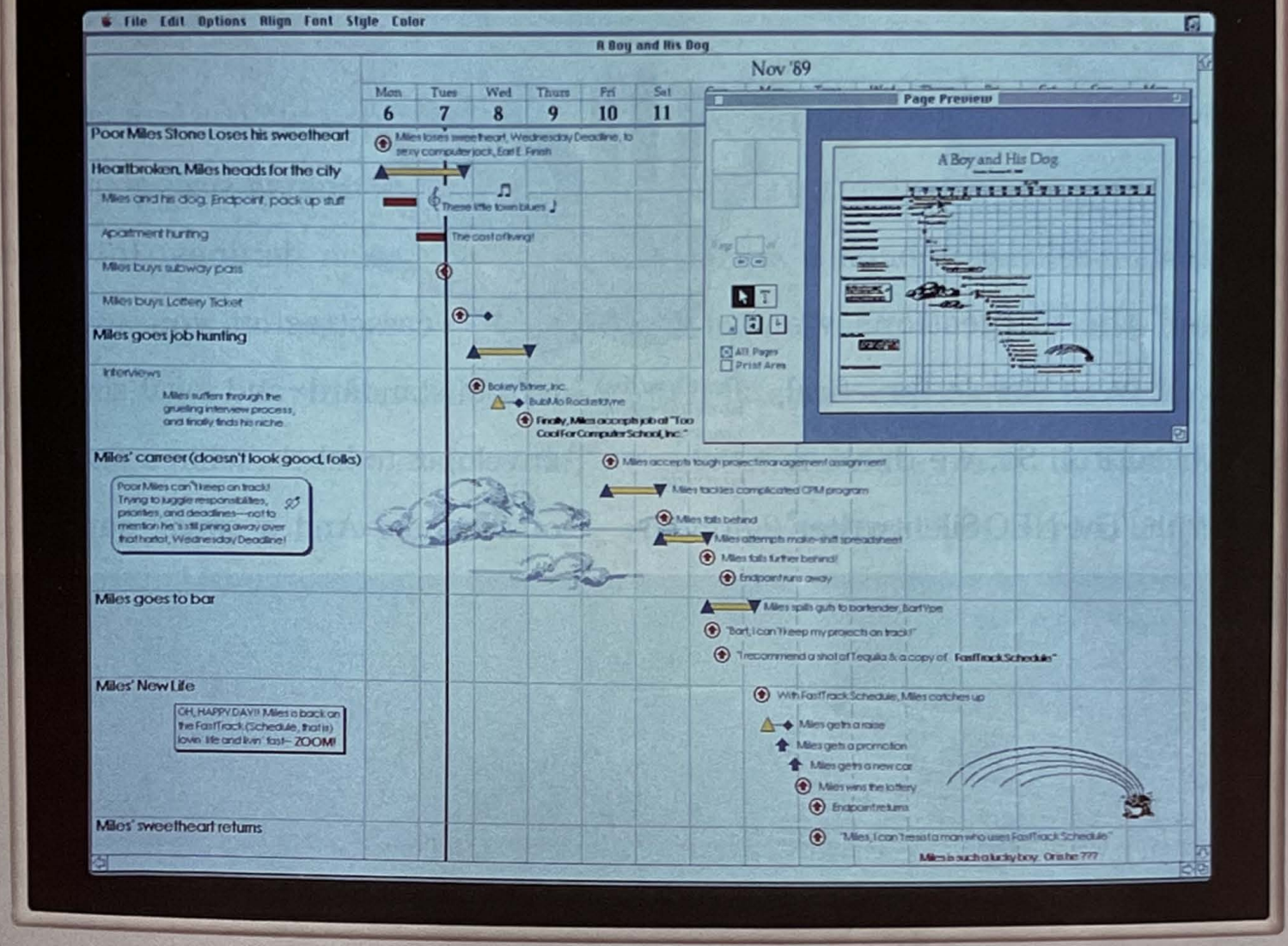
File Edit Options Align Font Style Color
A Boy and His Dog
Nov '89
Mon 6
Tues 7
Wed 8
Thurs 9
Fri 10
Sat 11
Page Preview
A Boy and His Dog
Poor Miles Stone Loses his sweetheart
Miles loses sweetheart, Wednesday Deadline, to sexy computer jock, Earl E. Finish
Heartbroken, Miles heads for the city
Miles and his dog, Endpoint, pack up stuff
These little town blues
Apartment hunting
The cost of living!
Miles buys subway pass
Miles buys Lottery Ticket
Miles goes job hunting
Interviews
Miles suffers through the grueling interview process, and finally finds his niche...
Bakey Bitner, Inc.
BubbMo Rocketdyne
Finally, Miles accepts job at "Too Cool For Computer School, Inc."
Miles' career (doesn't look good, folks)
Poor Miles can't keep on track! Trying to juggle responsibilities, priorities, and deadlines—not to mention he's still pining away over that harlot, Wednesday Deadline!
Miles accepts tough project management assignment
Miles tackles complicated CPM program
Miles falls behind
Miles attempts make-shift spreadsheet
Miles falls further behind!
Endpoint runs away
Miles goes to bar
Miles spills guts to bartender, Bart Vipe
"Bart, I can't keep my projects on track!"
"I recommend a shot of Tequila & a copy of FastTrack Schedule"
Miles' New Life
OH, HAPPY DAY!! Miles is back on the FastTrack (Schedule, that is) lovin' life and livin' fast– ZOOM!
With FastTrack Schedule, Miles catches up
Miles gets a raise
Miles gets a promotion
Miles gets a new car
Miles wins the lottery
Endpoint returns
Miles' sweetheart returns
"Miles, I can't resist a man who uses FastTrack Schedule"
Miles is such a lucky boy. Or is he ???

So much to schedule–so little time.

Draw your Gantt Chart Schedules right on screen! No longer are you forced to tackle complicated critical path programs to organize and schedule your activities. **FastTrack Schedule™** offers you a simple yet elegant way to quickly visualize all of your responsibilities and see if all of the items that you need to get done will fit into the time frame that you've allotted. When you need to make changes to your schedule, updating is a SNAP! By selecting effected bars or milestones you make an automatic link between tasks; then simply drag the items to their appropriate start date.

For presentations, dress up your schedules by designing custom start points, finish points and milestones; place labels and wrap-around text blocks anywhere; paste in graphics; format multi-level schedules as outlines; choose wall-charts or standard charts; and extensive page preview means no more printing surprises!

FastTrack Schedule™'s behind-the-scenes database keeps track of the dates that your bars represent, and can be accessed as ASCII and ported to other programs. It may also be the best Gantt Chart generator that you've ever invested in! All of those date calculations that you've done in your spreadsheets, databases, and CPM programs can be poured directly into **FastTrack Schedule™**, and voila, you've just created a schedule worthy of presenting to your boss, clients, sales team, marketing staff, or anyone else who might benefit from a presentation schedule.

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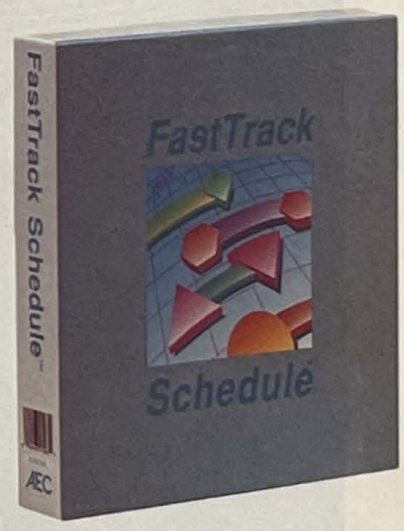


4½

October, 1989 MacUser Magazine

Another quality project-oriented productivity tool from AEC Management Systems, Inc.

We put all your best

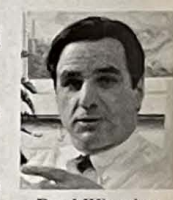
To make our newest laser printer dramatically better, we asked for outside help. Yours.

And the suggestions we received were simple, practical, even beautiful. So, we think, is the result. The NEC Silentwriter® 2 printer.

There's no fuss, no muss when you replace the single toner cartridge.

"It should handle different sizes of paper easily."

It does. Interchangeable cassettes let you switch from standard- and legal-size to envelopes to labels, all in a matter of seconds. And a single supply



Paul Wheeler
Boise, ID.
"Paper handling."

C&C Computers and Communications

NEC Technologies, Inc., 1414 Massachusetts Ave., Boxborough MA 01719. 1-800-NEC-INFO. In Canada, 1-800-343-4418.
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suggestions into a box.

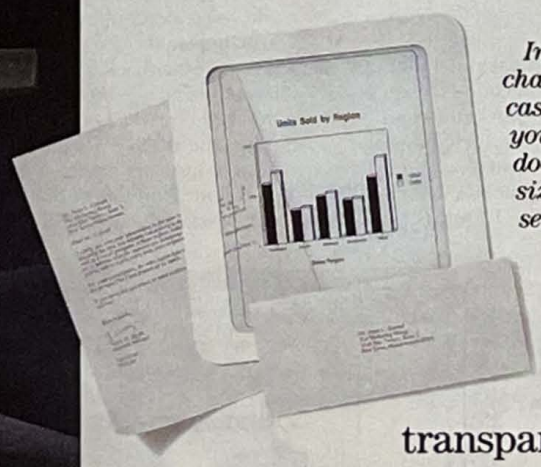
toner cartridge that you just pop in when needed, clean and simple.

Holly French
San Diego, CA.
"Speed and memory."

And as for operating noise? Well, its name speaks for itself.

"Ideally, I'd like a printer that combines lots of speed and memory with good resolution."

More, faster, better. Our engineers heard it time and time again. So they gave the Silentwriter2 a lightning-quick processor and lots of memory. So you can use today's most sophisticated graphics software. For better-looking brochures, labels and

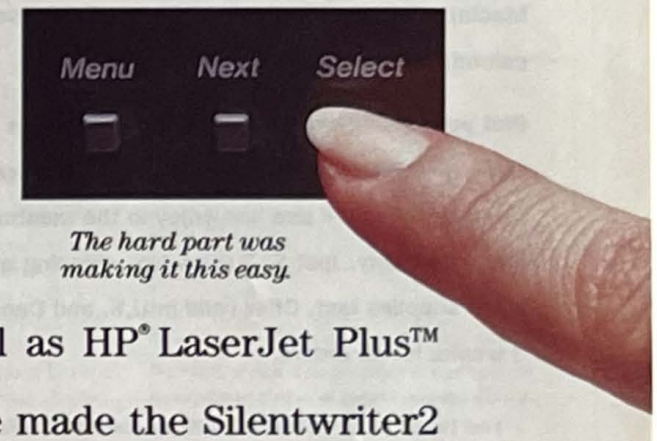


Interchangeable cassettes let you switch document sizes in seconds.

transparencies.

"To have Adobe® PostScript® built in would be key. The more fonts, the better."

We agree. So, the Silentwriter2 290 comes with a built-in PostScript interpreter as well as HP® LaserJet Plus™ emulation. And we made the Silentwriter2 260 with features like LaserJet® II emulation, which supports most standard software. What's more, it's a terrific value—the best in its price range. Plus, both are members of the most complete line of personal computers and printers available.



The hard part was making it this easy.

Scott Hainline
Stamford, CT.
"More fonts."

Specifications

Print Speed:
Up to 8 pages per minute

Language:
260: PCL
290: Adobe PostScript, PCL

Interfaces:
260: Parallel, RS 232-C
290: Parallel, RS 232-C, RS 422, Apple® LocalTalk®

Fonts:
260: 8 resident, LaserJet-compatible, optional SilentFont™ cards
290: 35 resident Adobe, PostScript Screen fonts for Macintosh® and Microsoft® Windows

Standard Memory:
260: 1 MB (expandable to 5)
290: 2 MB (expandable to 4)

Resolution:
300 x 300 dpi

Call 1-800-NEC-INFO today (in Canada, 1-800-343-4418), and check out the Silentwriter2 260 and 290 printers. We think you'll like what you see. After all, you designed them.

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On Target for 1990?

MacWEEK offers a clear plan of attack with this practical 1990 interactive wall calendar. The 36"x 23" clear plastic calendar comes complete with 39 static vinyl shapes you can use to highlight important dates. Calendar also features important Macintosh-related trade show dates. Dry-erase markers wipe off calendar face with ease.

Plot purchasing cycles, marketing campaigns or — most importantly — your vacation schedule. Against a wall or window, it's a visual tool you'll use and enjoy in the months to come. Send for yours today. Just $12 (plus tax, shipping and handling) while supplies last. Offer valid in U.S. and Canada only. Allow 2-3 weeks for all orders.

Yes! I need _____ MacWEEK wall calendars at $12 each plus applicable state/local tax and $5 each for shipping and handling.

Enclosed is my check/money order for $_____

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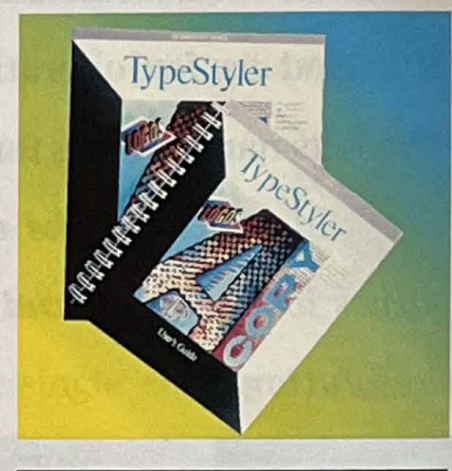
301 Howard Street
San Francisco, CA 94105

REVIEWS

Broderbund's TypeStyler sets new standards for type effects

Combines ease of use with innovative interface



By Dennis Klatzkin

The increasing sophistication of Macintosh typography applications has, for the most part, come at a high cost. Gone is the relative simplicity of handling type on the Mac, and the whole subject of fonts has become bewildering. Broderbund Software Inc.'s new TypeStyler finally reverses that trend, offering a wide range of special PostScript type effects in a program that's powerful, yet intuitive — one that should appeal to all levels of Mac users.

TypeStyler treats blocks of text as objects. In fact, it contains many of the basic features usually found in drawing or illustration programs, such as rulers, "magnetic" guide lines and different degrees of magnification. You can lock, group and selectively hide objects. In addition to text objects, you can create many types of geometric shapes or import Encapsulated PostScript (EPS), PICT and Paint files as objects.

The ability to open more than one document at a time and the advanced object-alignment options available in most drawing programs are missing in TypeStyler. But TypeStyler offers a flexible way to copy and paste font, shape, style and area attributes between objects as well as to align objects on their common centers.

The program's real power lies in the way it lets you modify text objects by stretching, distorting, rotating, shaping, curving and shadowing them. TypeStyler contains built-in libraries of 35 text shapes (arc, circle, arch, pennant, perspective and twist) and 35 type effects. You can modify these freely or create your own.

TypeStyler runs on a Mac Plus or later machine with two floppy drives and requires System 4.2 or later, although 2 Mbytes of RAM and a hard disk are suggested. The default MultiFinder partition is 1,600 Kbytes. TypeStyler supports full eight-bit color and can print to almost all QuickDraw and PostScript output devices, including color printers, at their maximum resolution. TypeStyler also can export graphics in EPS, Adobe Illustrator, Paint and PICT formats.

TypeStyler

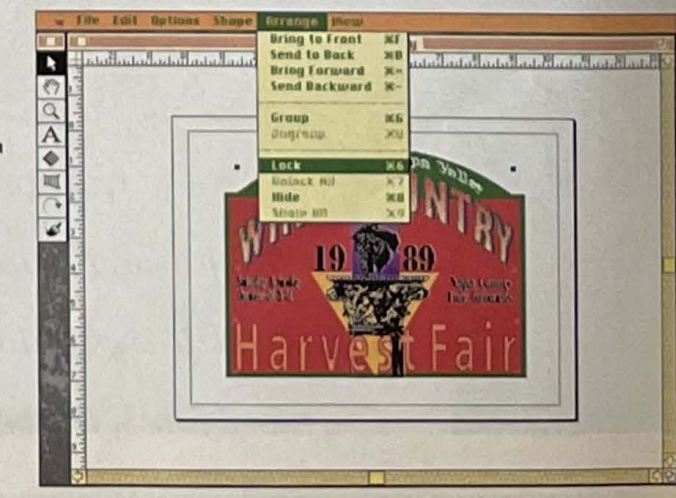
Broderbund Software Inc.
List price: $199.95 (introductory price for an indefinite period)

✚ Outstanding software design with exemplary use of Mac graphical interface; can convert many PostScript fonts to TypeStyler format, sparing users the expense of purchasing special font libraries.

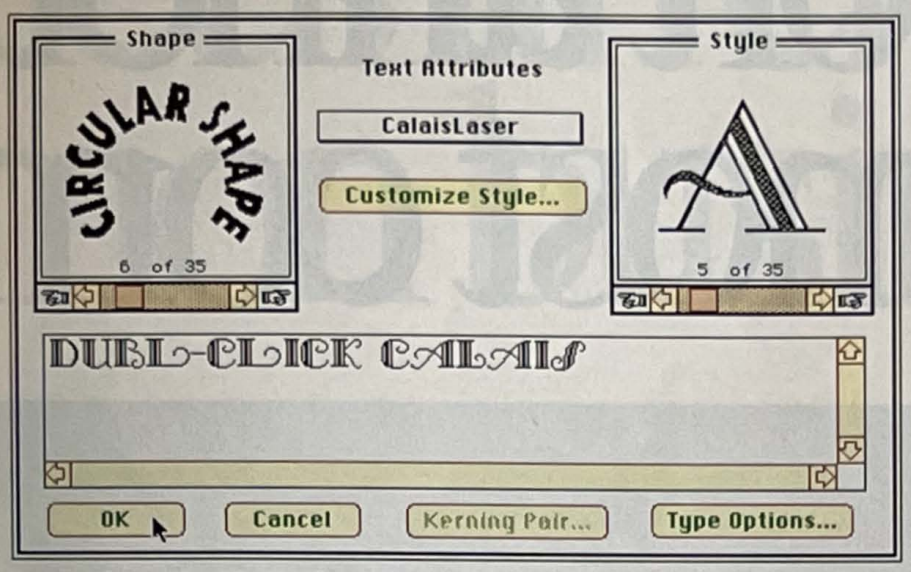
▬ Cannot open multiple documents simultaneously; Undo feature isn't universally supported; limited object-alignment options; no on-line help.

SmoothFont conversion. PostScript type effects are imaged in the printer rather than the Macintosh. Programs that control these special effects invariably face the difficulty of simulating them on screen. Some applications simply have you work in the dark — you don't actually see the text effects you've created until you print them. Other programs make you wait while they receive a screen image back from the printer after it has performed its PostScript processing.

Like Letraset's LetraStudio, TypeStyler solves the WYSIWYG dilemma by substituting a proprietary graphic font format for standard PostScript font outlines. This solution emphasizes interactive WYSIWYG screen dis-



TypeStyler contains many features typically found in drawing programs, such as the capability to change the layering order of objects or to group, lock and hide them selectively.



You can translate most Type 3 PostScript fonts (such as Dubl-Click Software Inc.'s Calais Bold, shown here) into TypeStyler's custom SmoothFont format. Version 1.01, due shortly, will allow conversion of Type 1 fonts.

play more than font library availability, but it produces a very close match between screen and printed page. TypeStyler comes bundled with 10 free AGFA/Compugraphic fonts.

Unlike LetraStudio, there's a conversion utility built into TypeStyler that transforms Type 3 (unencrypted and unhinted) PostScript fonts into its special SmoothFont format. You do not have to make any additional investments in a proprietary font library.

But developments on this front are moving rapidly. As we go to press, Letraset is readying LetraStudio 1.5, which will have a converter to translate Type 3 laser fonts into its own LetraFont format. And, more significantly, Broderbund is preparing very shortly to make available to TypeStyler users a free update of Version 1.01 that can translate almost all PostScript fonts, including most Type 1 fonts, such as those in Adobe's own font library.

Performance. We found TypeStyler to be functional, solid and particularly easy to learn and use. Like other object-oriented graphics applications, screen refreshing can be slow with complex drawings, but TypeStyler has options to limit constant redrawing and speed up minor modifications to your document. PostScript printers can take a long time to generate certain special effects, like graduated fills, but that's a limitation of the hardware, not necessarily the software.

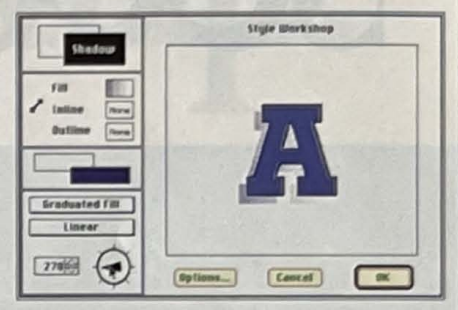
The principal flaws we found in TypeStyler are its inability to open multiple documents simultaneously and the inability to Undo some operations, like pasting attributes or changing text options. But these are minor drawbacks, and on the whole we think TypeStyler is a particularly strong entry against similarly priced or even much more expensive competitors.

Broderbund offers unlimited technical support for TypeStyler, although calls aren't toll-free. TypeStyler's spiral-bound, 228-page manual complements the program well; it's clearly written and heavily illustrated. Good tutorial and reference sections cover all aspects of the application thoroughly, but the manual is still easy to read. However, TypeStyler would benefit from a few on-line help screens — there are none in the program.

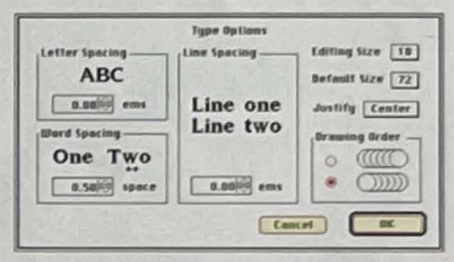
Conclusions. TypeStyler is an outstanding achievement. First, it succeeds well as a typography and graphics application, combining ease of use with an extremely functional and innovative user interface. Its shortcomings are trivial in light of its price and performance benefits.

Furthermore, TypeStyler stands out as a model Mac application. It is useful as well as elegant and enjoyable; it always appeals to your senses as well as your common sense. And it's clear proof that handling display type on the Mac doesn't have to be an increasingly obscure ability. We think TypeStyler is a refreshing reminder of what the Mac is all about, and we enthusiastically recommend it for graphics pros and occasional users alike.

Broderbund Software Inc. is located at 17 Paul Drive, San Rafael, Calif. 94903; (415) 492-3200; (800) 521-6263. □



Most text, style and shape options in Typestyler are managed from a series of dialog boxes that allow users to adjust settings easily with the mouse.



TypeStyler lets you control spacing for lines, words and letters to add fine font-display control to any application.

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If you're currently using Microsoft® Excel or Word, it's now possible for the people in your department to work together without having a get-together.

Just add Microsoft Mail.

Doing so will add years to the life of your company's carpet. And, perhaps more importantly, allow you to accomplish tasks that were previously impossible with *any* E-mail system.

Suppose, for instance, that you're preparing a report in Word. Because it features built-in Mail support, you can zap the report throughout your entire workgroup via Mail.

Without ever having to leave your program.

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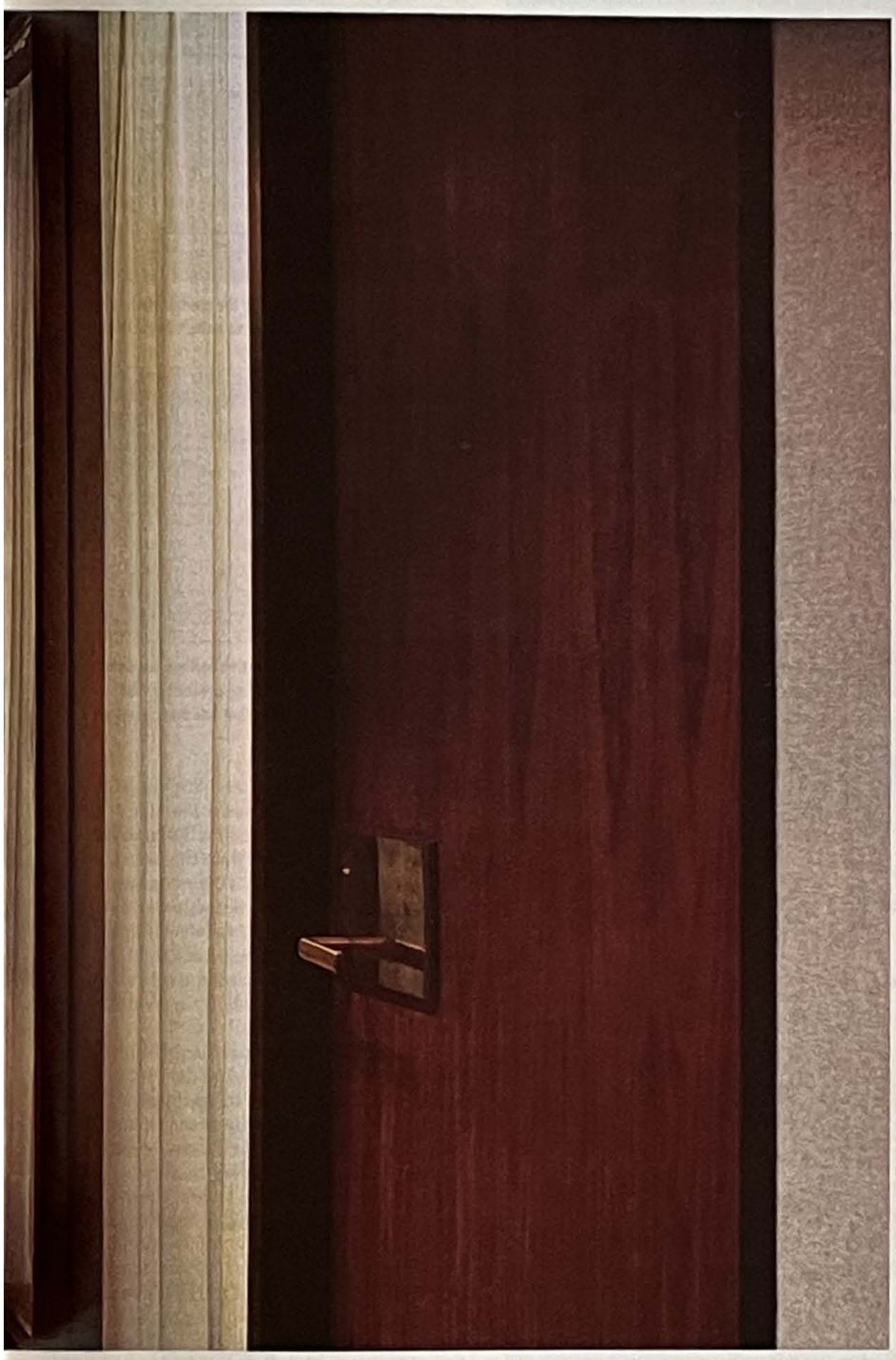

And without losing formatting.

Then, if those receiving your report are in Word, they can access your document with one keystroke, digest it, add pertinent info, even attach suggested changes. And spit it right back to you without leaving their program.

Now if you think that's whiz-bang, consider this: When you combine Microsoft Excel with Mail, you can do infinitely more than share spreadsheets.

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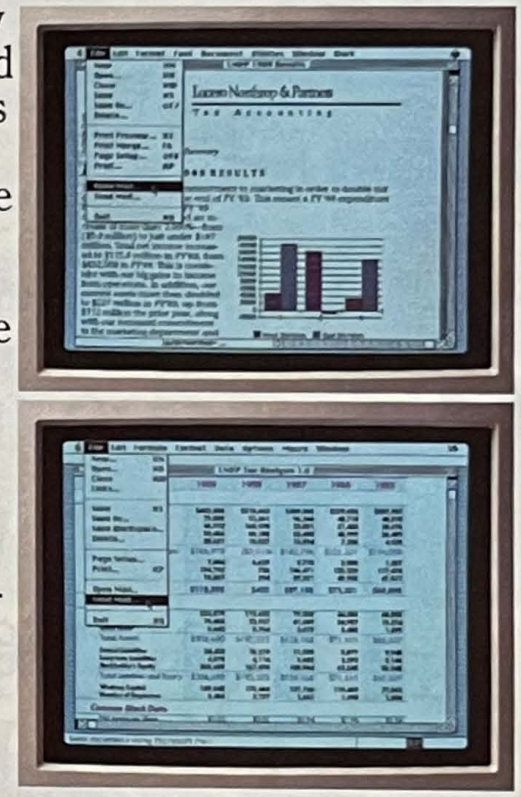
And that's just one example of how Microsoft Excel and Mail allow you to consolidate and distribute data across a network automatically. Even if you have both Macintoshes® and PCs.



Microsoft Excel and Word now have built-in Mail support. So you can send documents without ever leaving your program. Or entering the hallway.

Now that we've covered some of the unique ways that Microsoft Excel, Word and Mail work together, we'd like to add one more significant point.

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SuperANOVA

From Page 44

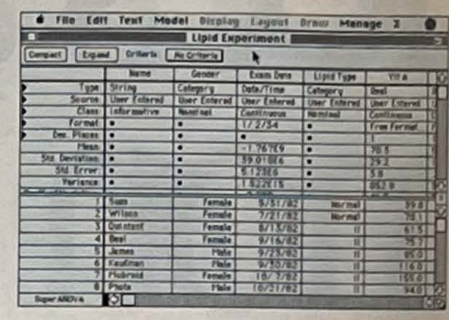
SuperANOVA to be quite complete.

An analysis is performed by creating a "model window" in which the relationships between the chosen variables are described. The mouse or keyboard may be used to select dependent and independent variables and to specify exactly how these factors interact in the model. Results are presented in a standard ANOVA table.

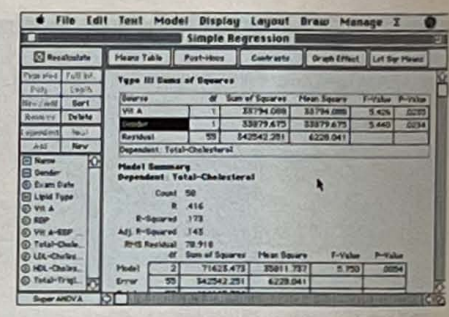
The model window has convenient buttons that will produce additional statistics and plots derived from the model. We found these display buttons very useful; they helped us determine if the model we had constructed was valid or if we had to manipulate the data more to uncover valid results. The plots, although quite useful for exploring data, are not suitable for presentation graphics because of limitations in axis scaling and in how different interactions are displayed.

Attractive model window. Perhaps the most interesting feature of SuperANOVA is that the information produced in the model window may be fully manipulated with a MacDraw-like palette of graphics and text tools. For example, with the mouse, users can adjust the width of the output columns and place tables and graphs right where they want them. Thus users can organize their model results into a very readable presentation.

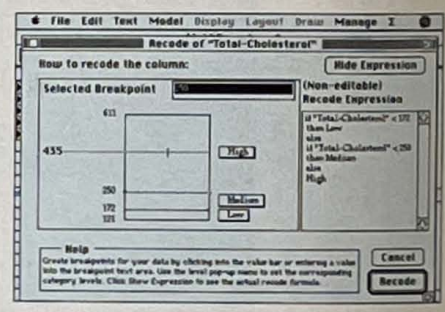
The model window may be saved and applied to other data sets or updated automatically when the data in the original data set is changed. We found this feature to be extremely valuable and a great time-saver.



Data is entered in SuperANOVA's spreadsheet-like window. Descriptive statistics are displayed in the upper portion.



Statistical tests are formulated in the model window. The mouse is used to select variables to include in the test.



SuperANOVA provides an interactive method for determining cut-off points when recoding a variable. The user may edit the recoding algorithm that has been generated in the left part of the window.

Performance. We tested SuperANOVA on both a Macintosh SE and a Mac IIcx machine. As expected, the Mac II-family version was quite a bit faster than the Mac Plus/SE version. The Mac II version was very responsive and we were able to rapidly produce several different models without feeling that we were waiting too much. The Mac Plus/SE version, on the other hand, was so slow that we believe it's not really worth using.

We observed two unreproducible glitches. When we were loading a large data set on the Mac Plus/SE version, the program unexpectedly quit. Also, the Mac II-family version sometimes displayed a strange "ghosting" effect: The display buttons appeared to have multiple layers. Neither of these annoyances presented a significant problem, however.

Conclusions. Abacus Concepts' SuperANOVA is a well-thought-out statistical program that can make building and testing general linear models faster and more enjoyable for the knowledgeable researcher. It provides more modeling tests than other Macintosh statistics packages. The ability to precisely control and print the model window is an excellent feature that will enable analysts to present their results in a more intelligible fashion. Although the documentation is quite complete, we wish that it had been more explicit on how the software could be used by someone other than a trained statistician.

Abacus Concepts Inc. is located at 1984 Bonita Ave., Berkeley, Calif. 94704; (415) 540-1949. □

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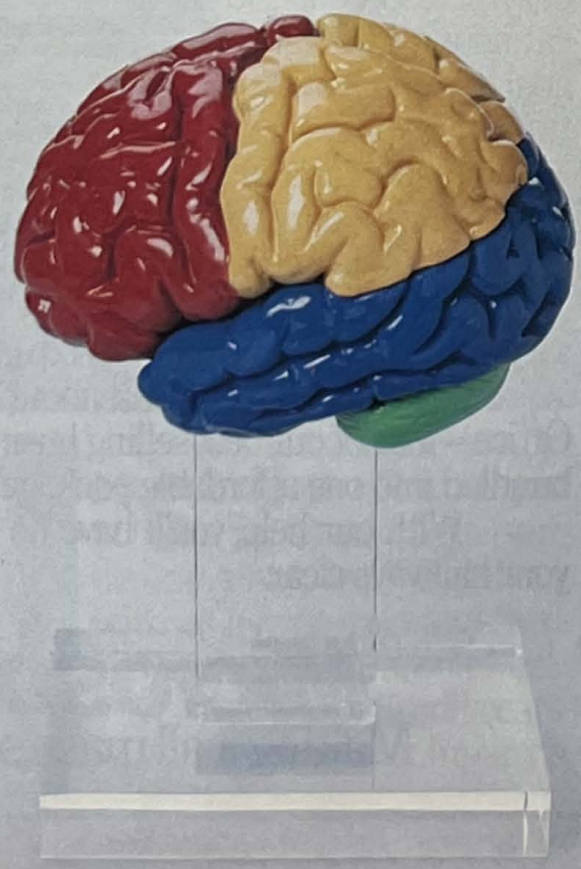

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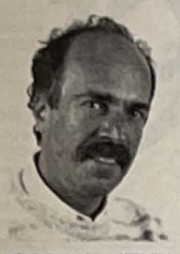
The Human Interface

A magic bullet for telecommunications



BY DENNIS KLATZKIN

Some years back, not only did your hand lotion have to contain lanolin, so did your shoe polish. Having chlorophyll in your chewing gum and toothpaste wasn't enough; you needed it in your pet food, too. It's a wonder we didn't become a planet of bright green creatures — pleasant-smelling and soft-skinned ones!

We're always looking for miracle ingredients. Forget about the formidable process of addressing the real issues behind complex problems. Just give us a magic bullet.

Today, a magic-bullet hoax is being foisted upon the Macintosh public by the graphical user interface zealots — the notion that if icons, windows and pull-down menus make for better spreadsheets and word processors, they must also be panaceas for the telecommunications morass. Just slap a Macintosh interface on an electronic information or mail service and it'll be better, if not perfect.

As we say in California, "Oh, were life that unclouded!" Or, as we used to say in New York, "What a crock!"

I'm not referring to the general-purpose communications programs like The Freesoft Co.'s White Knight or Software Ventures Corp.'s MicroPhone II — they're subjects for another column. I'm talking about the dedicated software for commercial networks like CompuServe, MCI Mail, Connect and America Online — the so-called "front ends" for these services.

What an ironic euphemism! I know one end from the other, as in which end of a horse is last to leave the gate. And I know mediocre software when I see it. Believe me, these are not front ends.

What's wrong with giving these programs a Macintosh personality? Nothing at all — in theory. No area of personal computing more desperately needs a good helping of ease of use. But in practice, a graphical user interface alone doesn't guarantee very much. A good communications front end must also satisfy certain fundamental criteria.

For instance, consider Desktop Express, co-produced by MCI Mail, Dow Jones and Solutions Inc. It's shoddy software, plain and simple — confusingly designed, buggy and practically unsupported. What's more, it runs so slowly that many people have wondered if it was written in BASIC. I'd call that a slanderous attack upon BASIC.

Criterion No. 1: The software must work well. High-quality Mac programs can only result from high-quality programming.

How about the Connect service's "front end" for the Macintosh? It satisfies the first condition (although it violates the Mac interface standard in the process). But the software segregates every database area, message and file description into separate windows. Before long, your screen is awash in trails of disjointed, overlapping windows — an informational conga line.

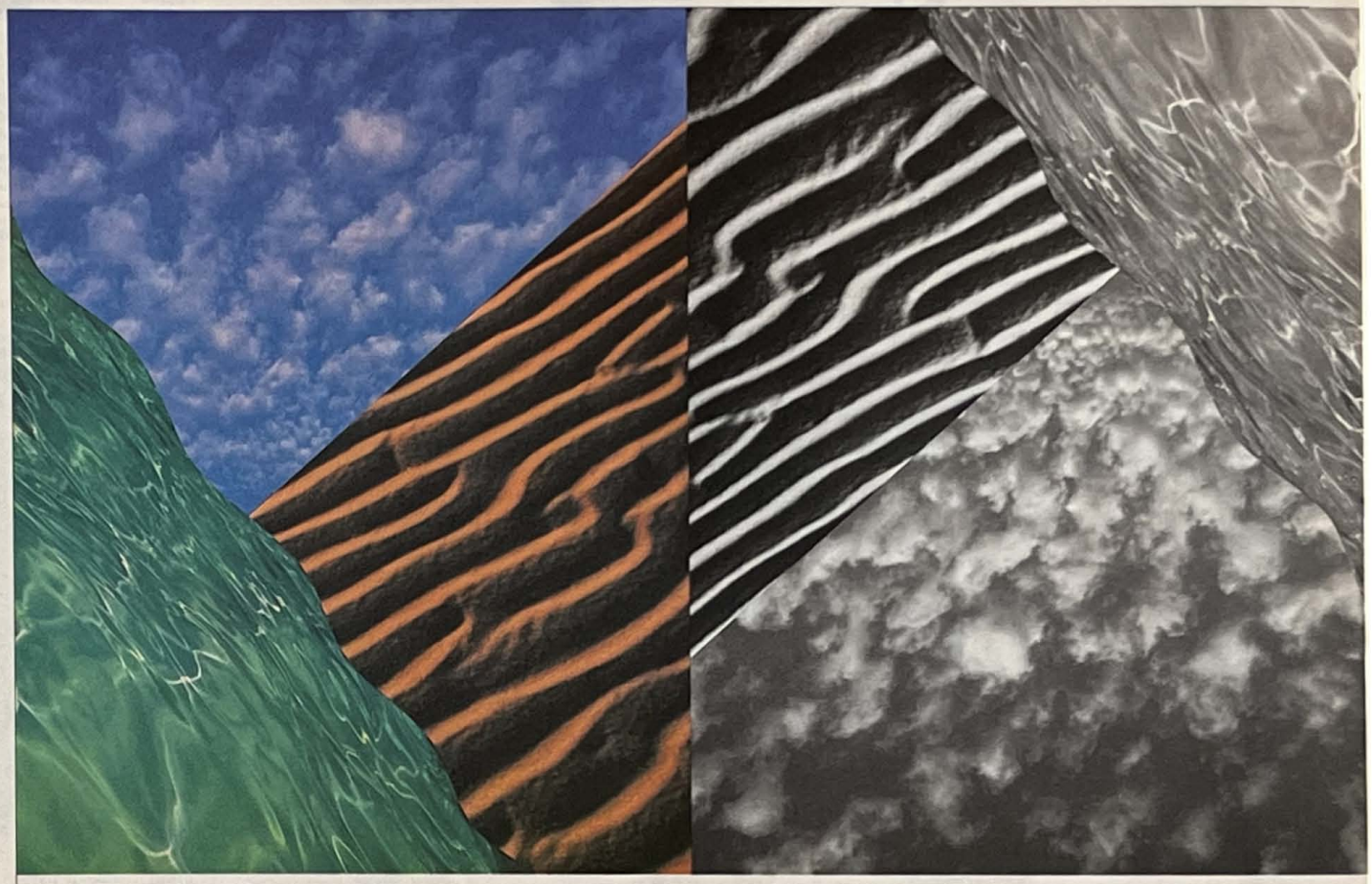
Criterion No. 2: The software should help organize and simplify the telecommunications process, not detract from it or make it more confusing.

Quantum's software for its new America Online service exhibits the same "overwindowing" problem as the Connect software but has fewer user features, resulting in a somewhat cleaner but minimal user interface. Moreover, this fledgling service doesn't yet have the range and sophistication of on-line offerings available from its competitors.

Criterion No. 3: The software should deliver useful information and services. It can be only as good as the on-line network it represents.

The CompuServe Navigator is the only program in the group that even approaches the definition of a decent telecommunications front end. It has faults, but at least it helps to speed up and simplify the process of telecommunicating. And, since it lets you preprogram CompuServe sessions while you're off-line, it can save you time and money.

When it comes to on-line services, the Macintosh user interface is no magic bullet — in fact, it's been largely misused. Applied cleverly and prudently, it could serve to ease the pains of telecommunicating by truly organizing information rather than just splintering it. But that would involve a level of innovation we have yet to witness. □



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The Year in Reviews

The following is a list of all products reviewed in MacWEEK in 1989, together with the issue date, for your reference. Items with an asterisk were reviewed in Reviews in Briefs.

Accounting

atOnce!	Layered Inc.	8/1/89
Project Billing 1.56	Satori Software	6/13/89
Quicken 1.5*	Intuit	8/8/89
TimeMinder*	Aatrix Software	10/3/89
Timeslips III 1.1e	North Edge Software Corp.	6/13/89

Add-on cards

DayStar 33/030	DayStar Digital Inc.	2/28/89
MacClock II*	MacSema	5/16/89
MacSprint II	Orchid Technology Inc.	4/25/89
SiCLONE Si3033	SiClone Sales & Engineering Corp.	2/28/89

Communications and networking

AlisaShare/AlisaTalk	Alisa Systems	1/10/89
DaynaTalk	Dayna Communications Inc.	10/17/89
DirectServe	Jasmine Technologies Inc.	10/31/89
Ether+	Compatible Systems Corp.	10/17/89
eXodus	White Pine Software	9/26/89
FAXstf	STF Technologies	1/17/89
FlashTalk	TOPS, a division of Sun Microsystems	10/17/89
HyperMail*	MaxStax+	6/20/89
InterFax 12/48	Alvaton	1/17/89
LapLink Mac 2.0	Traveling Software	2/14/89
Liaison 1.01	Infosphere Inc.	2/7/89
Mac241	White Pine Software	6/6/89
MacBLAST	Communications Research Group	2/21/89
MacChuck 1.5	Vano Associates Inc.	4/18/89
MacLinkPlus 3.0	Dataviz Inc.	2/14/89
Modem	Adaptec Inc.	10/17/89
PacerShare/PacerLink	Pacer Software	1/10/89
PC-QuickShare 2.0	Compatible Systems Corp.	2/14/89
pcMACTERM/Network	Dynamic Microprocessor Associates	4/18/89
Portable Pack*	Farallon Computing Inc.	11/7/89
QuickMail 2.01	CE Software Inc.	8/8/89
TeleBridge	Shiva Corp.	6/20/89
Timbuktu/Remote	Farallon Computing Inc.	4/25/89
VersaTerm Pro 3.0	Synergy Software	5/2/89
xFer	Messenger Software Inc.	2/14/89

Computer-aided design

ArchiCAD 3.3	Graphisoft	10/10/89
Blueprint	Graphsoft	11/7/89
CADMOVER*	Kandu Software Corp.	10/24/89
Claris CAD	Claris Corp.	3/28/89
Claris Graphics Translator	Claris Corp.	10/24/89
Dreams	Innovative Data Design Inc.	1/17/89
DynaPerspective	Dyneware Corp.	3/7/89
IN-CAD 1.1	Infinite Graphics Inc.	4/11/89
Mac Architrion II	Cimeor S.A.	10/10/89
MiniCad+	Graphsoft	5/23/89
ModelShop	Paracomp Inc.	12/5/89
PEGASYS II 3.2.3	IGC Technology Corp.	5/9/89
Precision 1.2	Innovative Systems Inc.	12/12/89
Super 3D 2.0	Silicon Beach Software Inc.	9/19/89
Swivel 3D 1.1	Paracomp Inc.	9/19/89

CPUs

Cambridge Z88Lite	Cambridge North America	6/27/89
Mac IIx, IIex, SE/30	Apple	4/4/89
Macintosh IIci	Apple	10/24/89
Macintosh Portable	Apple	10/24/89

Databases and forms processors

4th Dimension 2.0.5	ACIUS Inc.	11/14/89
DAtabase 1.1	Preferred Publishers	2/14/89
Double Helix 3.0	Odesta Corp.	11/14/89
FLEXFORM*	FORMula Inc.	4/18/89
FoxBASE+/Mac 1.1	Fox Software Inc.	3/21/89
FoxBASE+/Mac 2.0	Fox Software Inc.	11/14/89
McMax 2.0	Nantucket Corp.	3/21/89
Omnis 5 1.04	Blyth Software	11/14/89
Oracle	Oracle Corp.	3/14/89
Panorama	ProVUE Development Corp.	2/28/89
SmartForm Designer	Claris Corp.	1/17/89
TrueForm 2.0	Adobe Systems Inc.	12/5/89

Desktop publishing

Kern-Rite	The Software Shop Inc.	6/6/89
KeyMaster 1.0	Altsys Corp.	3/21/89
LetraStudio	Letraset USA	1/24/89
Multi-Ad Creator	Multi-Ad Services	8/22/89
PageMaker Color Extension	Aldus Corp.	9/26/89
Publish It! 1.1	Timeworks Software	8/8/89
Ready,Set,Go! 4.5	Letraset USA	2/21/89
SmartArt I	Emerald City Software	5/16/89
SmartArt II & III*	Emerald City Software	9/26/89
Springboard Publisher 1.06	Springboard Software Inc.	1/3/89
TableTools	Mansfield Systems Inc.	7/25/89

Disk recovery, backup and security

Anti-Virus Kit*	1stAid Software	5/2/89
Anti-Virus Kit	1stAid Software	8/22/89
AntiToxin*	Mainstay	3/21/89
Camouflage*	usrEZ Software	5/16/89
Camouflage	usrEZ Software	10/24/89
Disinfectant*	Northwestern University	4/4/89
DiskFit/Network DiskFit 1.5*	SuperMac Software	4/4/89
DiskLock*	Fifth Generation Systems Inc.	10/24/89
DOS Mounter*	Dayna Communications Inc.	6/13/89
Fastback II 2.0	Fifth Generation Systems Inc.	9/12/89
FileGuard	ASD Software Inc.	10/24/89
FileGuard*	ASD Software Inc.	4/4/89
InfoGuard*	Advanced Gravis	2/28/89
NetStream	Personal Computer Peripherals Corp.	11/7/89
Retrospect	Dantz Development Corp.	9/12/89
SAM	Symantec Corp.	8/22/89
Sentinel 2.2	SuperMac Technology	10/24/89
SUM 1.1*	Symantec Corp.	3/21/89
SUM II	Symantec Corp.	10/3/89
The Complete Undelete*	1stAid Software	12/5/89
Virex 2.0	HJC Software	8/22/89

Games

Advanced Flight Trainer	Electronic Arts	11/21/89
Apache Strike	Silicon Beach Software Inc.	11/21/89
Balance of Power 1990	Mindscape	11/21/89
Carmen Sandiego series	Broderbund Software Inc.	11/21/89
Crystal Quest	Casady & Greene	11/21/89
Leprechaun	Shodan	11/21/89
MacGolf Classic	XOR Corp.	11/21/89
Mean 18	Accolade	11/21/89
Microsoft Flight Simulator	Microsoft Corp.	11/21/89
Might & Magic I	New World Computing Inc.	11/21/89
Net Trek — The Real Version	Premier Technology Inc.	11/21/89
Pool of Radiance	Strategic Simulations	11/21/89
Shanghai	Activision	11/21/89
ShufflePuck Cafe	Broderbund Software Inc.	11/21/89
SimCity	Broderbund Software Inc.	11/21/89
TaskMaker	XOR Corp.	11/21/89
Tetris	Spectrum Holobyte	11/21/89
The Bard's Tale I	Electronic Arts	11/21/89
World Class Leader Board Golf	Access Software	11/21/89

Graphics

Adobe Streamline	Adobe Systems Inc.	6/6/89
Art Room CD-ROM*	Image Club	3/7/89
Canvas 2.0	Deneba Software	1/24/89
Cliptures*	Dream Maker	3/7/89
CA/Cricket ColorPaint	CA/Cricket Software Inc.	5/16/89
Digital Darkroom 1.1*	Silicon Beach Software Inc.	6/13/89
Electronic Art*	Metro ImageBase	3/7/89
FreeHand 2.0	Aldus Corp.	2/7/89
GraphistPaint II	Aba Software Inc.	1/31/89
LaserPaint Color II	Laserware	5/2/89
MacDraw II 1.1*	Claris Corp.	3/28/89
MapMaker 4.0	Select Micro Systems Inc.	11/7/89
Media Clip-Art CD-ROM*	Media Clip-Art	5/9/89
Modern Artist 2.0	Computer Friends Inc.	1/31/89
PhotoMac	Avalon Development Group	3/2/89
Photon Paint	MicroIllusions	1/31/89
PixelPaint 2.0	SuperMac Technology	4/18/89
PixelPaint Professional	SuperMac Technology	12/5/89
Studio/8	Electronic Arts	1/31/89
SuperPaint 2.0	Silicon Beach Software Inc.	4/25/89
United Artwork CD-ROM*	United Syndicated Artwork	5/23/89

Input devices

Cordless mouse	Mobius Technologies	11/21/89
Cordless mouse	Practical Solutions	11/21/89
Fastkeys*	SoundSight Corp.	10/3/89
HotKeys*	Keep It Simple Software	8/22/89
Macintosh II Workstation*	Ergotron Inc.	1/24/89
MacPro Extended Keyboard	Key Tronic Corp.	9/26/89

Miscellaneous hardware

MacRecorder*	Farallon Computing Inc.	8/8/89
MacUPS*	Statpower Technologies	2/28/89
MouseMaster*	Practical Solutions	7/25/89
MouseStick Controller*	Advanced Gravis	7/25/89

Monitors, video cards and display devices

ColorBoard 224	RasterOps Corp.	8/8/89
Color Capture Board	Data Translation Inc.	4/25/89
ColorSpace II	Mass Microsystems Inc.	4/25/89
DirectColor/24	Radius Inc.	8/8/89
DP5200S Data Projector	NEC	1/31/89
Full Page Display	Radius Inc.	4/4/89
Genlock Converter	Julian Systems Inc.	4/25/89
Macintosh Portrait Display	Apple	4/4/89
Mitsubishi AM-3501R	Mitsubishi Electronics	1/31/89
Mitsubishi XC3710	Mitsubishi Electronics	1/31/89
NuVista	Truevision Inc.	8/15/89
Spectrum/24	SuperMac Technology	8/8/89
TV Producer	Computer Friends Inc.	4/25/89
Two Page Display	Radius Inc.	4/4/89
Two-Page Monochrome Monitor	Apple	4/4/89

Numeric tools

Best Answer	Heizer Software	1/10/89
Calculator Construction Set*	Dubl-Click Software	10/3/89
Crystal Ball	Market Engineering Corp.	1/10/89
DATA	Tree Age Software	1/10/89
Excel 2.2	Microsoft Corp.	7/25/89
Expressionist 2.0	Prescience Corp.	9/19/89
Extend 1.1f	Imagine That Inc.	6/20/89
Fastat	Systat Inc.	5/9/89
Formulator	Icom Simulations Inc.	9/19/89
Igor	WaveMetrics	7/11/89
MathCAD 2.0	MathSoft	8/1/89
MathType 2.0	Design Science Inc.	9/19/89
Milo	Paracomp	1/17/89
Parameter Manager Plus	GenRad (formerly Rebus Development)	7/11/89
Passage II	Passage Software	7/11/89
PowerMath II 2.50	Central Products Corp.	8/1/89
SPAMM*	Bravo Technologies	6/27/89
TKSolver Plus 1.1	Universal Technical Systems	8/1/89
UNITize*	Rainbow Bridge Software	5/23/89
What's Best	General Optimization Inc.	1/10/89
Wingz 1.0	Informix Software	3/14/89
Wingz 1.1*	Informix Software	10/31/89

Organizational tools

Calendar Creator*	Channelmark Corp.	3/14/89
Colleague	Colleague Business Software Inc.	3/21/89
Focal Point II	TENpoint0	3/21/89
For the Record*	Nolo Press	6/6/89
Hyper-Action	Multi-Solutions Inc.	3/21/89
HyperWorks Organizer	Timeworks Inc.	3/21/89
Inspiration 2.0	Ceres Software Inc.	10/10/89
WillMaker*	Nolo Press	6/6/89

Presentations and multimedia

MacroMind Director	MacroMind Inc.	5/16/89
MORE II	Symantec Corp.	1/17/89
Persuasion	Aldus Corp.	1/17/89
Plus 1.11	Spinnaker Software (formerly Olduvai)	10/17/89
Screen Recorder	Farallon Computing Inc.	4/25/89
Studio/1	Electronic Arts	8/15/89
SuperCard	Silicon Beach Software Inc.	7/25/89

Printers

ColorScript 100 Model 10	QMS Inc.	11/7/89
CrystalPrint Publisher	Qume Corp.	10/10/89
DeskWriter	Hewlett-Packard Co.	8/8/89
DirectPrint	Jasmine Technologies Inc.	10/10/89
HP PaintJet	Hewlett-Packard Co.	9/26/89
MirrorImage	Mirror Technologies	10/10/89
Panther PDX	La Cie Ltd.	10/10/89
Personal Page Printer II	IBM Corp.	4/11/89
Phaser CPS	Tektronix Inc.	11/7/89
Pixelmaster	Howtek Inc.	11/7/89
QuickStep	Alvaton	10/10/89
Tektronix ColorQuick	Tektronix Inc.	9/26/89

Programming

101 Scripts and Buttons	Individual Software	4/11/89
CAUSE	Maxem Corp.	6/20/89
Dialoger	theResult Software Inc.	9/12/89
Just Enough Pascal	Symantec Corp.	1/24/89
MacAnalyst/MacDesigner	Excel Software	4/25/89
Pearl LISP	Apple (formerly Coral Software)	1/3/89
ScriptEdit 1.1*	Sonak Software Inc.	12/12/89
THINK C 4.0	Symantec Corp.	10/10/89
TopDown	Kaetron Software Corp.	4/25/89
Wild Things	Language Systems Corp.	9/12/89

Reference works

A History of Personal Workstations*	Addison-Wesley	6/20/89
AppleTalk Network System Overview*	Addison-Wesley	8/1/89
Electronic Whole Earth Catalog*	Broderbund Software	3/28/89
Expert Advisor: Adobe Illustrator*	Addison-Wesley	5/2/89
Expert Advisor: Microsoft Word 4.0*	Addison-Wesley	6/27/89
HyperBible*	Beacon Technology	2/7/89
HyperCard Stack Design Guidelines*	Addison-Wesley	9/12/89
HyperTalk Bible*	The Waite Group	2/7/89
Inside AppleTalk*	Addison-Wesley	8/1/89
Mastering Aldus FreeHand*	Dow Jones-Irwin	5/2/89
The HyperTalk Bible*	Howard W. Sams & Co.	4/25/89
The Macintosh Bible, second edition*	Goldstein & Blair	2/7/89
The NeXT Book*	Addison-Wesley	8/15/89
Tricks of the HyperTalk Masters*	Howard W. Sams & Co.	4/25/89
Understanding Computer Networks*	Addison-Wesley	8/1/89
Webster's Dictionary on CD-ROM*	Highlighted Data	5/9/89

Scanners, digitizers and OCR software

AutoREAD 1.2	Tutorland	10/3/89
ComputerEyes	Digital Vision Inc.	5/2/89
Datacopy 730GS	Datacopy Corp.	3/28/89
Datacopy Accutext	Xerox Imaging Systems	6/13/89
LightningScan	Thunderware Inc.	6/27/89
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ProViz Color Video Digitizer	Pixelogic Inc.	4/25/89
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Scanmaster	Howtek Inc.	9/19/89
Sharp JX-450	Sharp Electronics	9/19/89
TextPert 2.1	CTA Inc.	2/7/89
TextPert 3.01	CTA Inc.	10/3/89

Storage devices

2GIG	Genius Inc.	8/8/89
Bernoulli Box II/44	Iomega Corp.	8/15/89
Cirrus 610 mb	La Cie Ltd.	10/31/89
Genesis 6000	MACsetra Technologies	7/11/89
Jetstream	Personal Computer Peripherals Corp.	8/8/89
Mac 650 HCV	Storage Dimensions	10/31/89
MacinStor 345-HCV	Storage Dimensions	8/1/89
Maxcess M600	Maxcess Inc.	10/31/89
MegaDrive 20	Jasmine Technologies Inc.	1/10/89
MicroNet IIi-173	MicroNet Technology Inc.	5/9/89
MicroNet SB-330	MicroNet Technology Inc.	8/1/89
MicroNet SB-620	MicroNet Technology Inc.	10/31/89
Nova 650i	Microtech International	10/31/89
Optical 600 Plus	Relax Technology Inc.	7/11/89

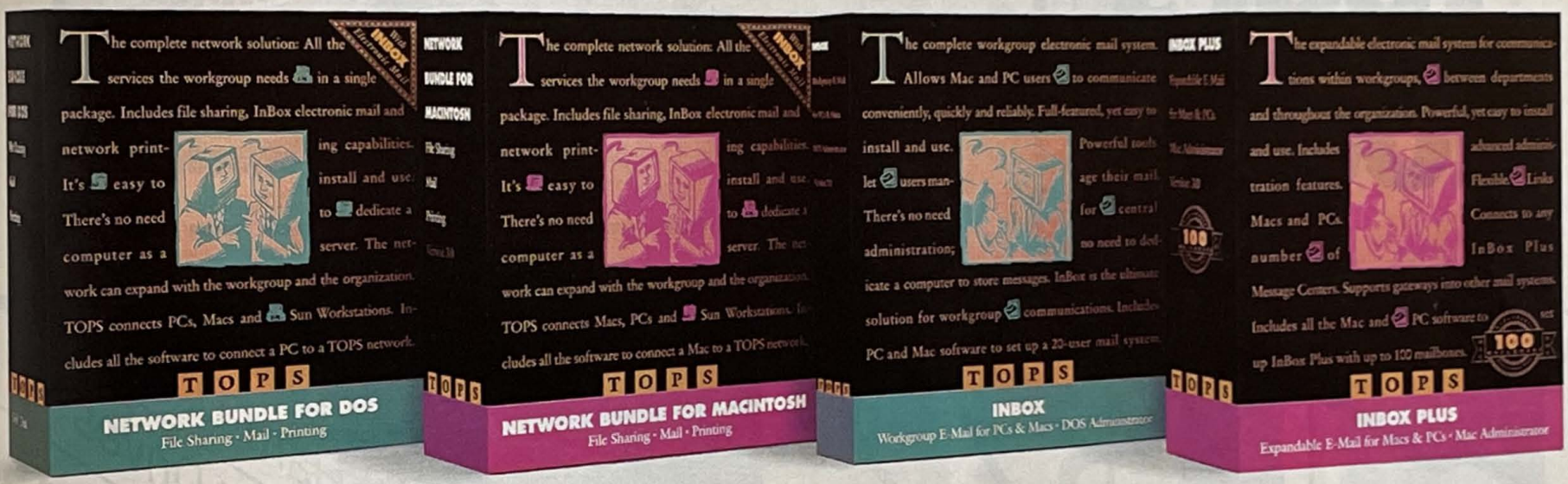
Utilities

Aask*	CE Software Inc.	1/31/89
Accu-Weather Forecaster*	Metacomet Software	6/27/89
Adobe Type Manager	Adobe Systems Inc.	12/5/89
After Dark*	Berkeley Systems	10/17/89
AutoSave II*	Magic Software	4/25/89
Calendar DA*	shareware	4/11/89
CanOpener*	Abbott Systems	7/11/89
Capture 2.0*	Mainstay	6/13/89
ClickPaste*	Mainstay	2/21/89
ClipShare*	Olduvai Corp.	10/10/89
Exposure 1.0.2*	Preferred Publishers Inc.	12/12/89
FileMagic*	Magnus Corp.	2/7/89
HandOff*	Software Innovations Inc.	12/5/89
ICONizer*	DiscTech Corp.	10/10/89
INIThound 1.0*	Cambridge Information Ware	10/31/89
INITPicker*	Microseeds Publishing	1/31/89
Init*	Natural Intelligence	1/31/89
Kiwi Envelopes 3.0*	Kiwi Software Inc.	9/12/89
Lightning Labels*	MaxStax+	6/20/89
MacTree Plus	Go Technology Inc.	6/13/89
Mail Rater 1.1*	Tight Line Software	11/7/89
MasterJuggler 1.5*	ALSoft Inc.	8/1/89
MockPackage Plus*	CE Software	1/17/89
PictureBook*	Loop Software	2/21/89
POWERmenus*	Magic Software	4/25/89
ScreenSnap 2.1*	Knowledge Source Inc.	10/17/89
SetClock*	Shareware	4/11/89
SmartScrap and The Clipper 2.0*	Solutions International	1/10/89
SnapJot*	Trillium Software	2/21/89
Sticky Business*	Williams & Macias	5/9/89
StuffIt*	Aladin Software	4/11/89
SuperGlueII*	Solutions International	8/15/89
Tablecloth*	User-Tek	7/11/89
Virtual	Connectix Corp.	3/21/89
XTree Mac	XTree Co.	8/13/89

Word processing

BigThesaurus	Deneba Software	3/7/89
BigThesaurus	Deneba Software	12/5/89
Coach Professional 3.0	Deneba Software	12/5/89
DocuComp	Advanced Software Inc.	10/3/89
ExpressWrite*	Exodus Software	3/14/89
Language Master 2.1	Franklin Software	12/5/89
MacProof 3.2.1*	Lexpertise US Inc.	9/12/89
MacWrite II	Claris Corp.	4/18/89
MarkUp 1.1	Mainstay	12/12/89
Microsoft Word 4.0	Microsoft Corp.	5/23/89
Nisus 1.01	Paragon Concepts Inc.	3/7/89
Nisus 2.02*	Paragon Concepts Inc.	9/26/89
Preditor*	Evatec Software	6/20/89
QuickLetter*	Working Software Inc.	1/3/89
Sonar Professional 3.1*	Virginia Systems Software Services	8/22/89
Spellswell 2.2	Working Software Inc.	12/5/89
Thunder II 1.0.1	Electronic Arts	12/5/89
Vantage DA*	Preferred Publishers Inc.	2/14/89
Word Finder 2.0	Microlytics Inc.	12/5/89
WordMaker 1.0.1	New Horizons Software	9/26/89
WriteNow 2.0	T/Maker Co.	1/3/89

Four reasons why 1990 will be the year of the workgroup.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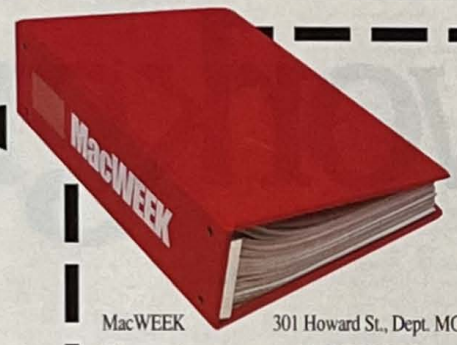

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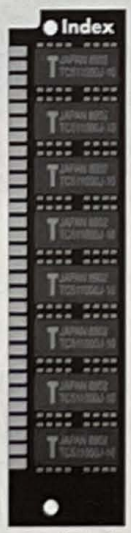

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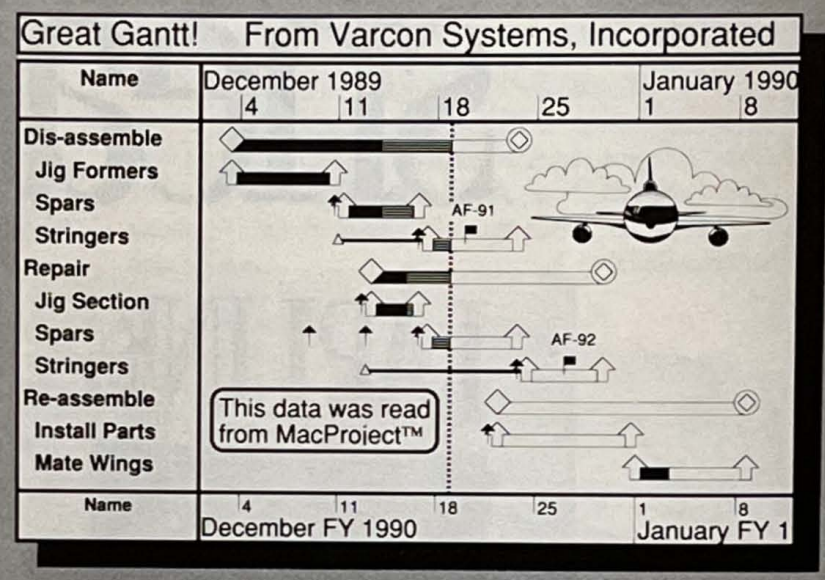

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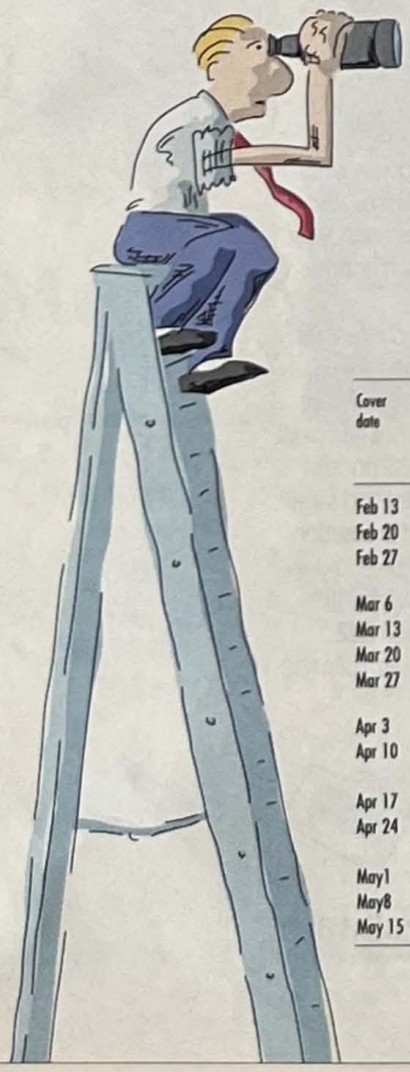

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Feb 27	**GA**	Feb 16	Feb 13
Mar 6	**GA**, E-mail	Feb 23	Feb 20
Mar 13	**CAD**	Mar 2	Feb 27
Mar 20	**MacWEEK 200**, Printers	Mar 9	Mar 6
Mar 27	**GA**	Mar 16	Mar 13
Apr 3	**NeXT**, Modems	Mar 23	Mar 20
Apr 10	**Storage Supplement**, Software development	Mar 30	Mar 27
Apr 17	Expansion boards	Apr 6	Apr 3
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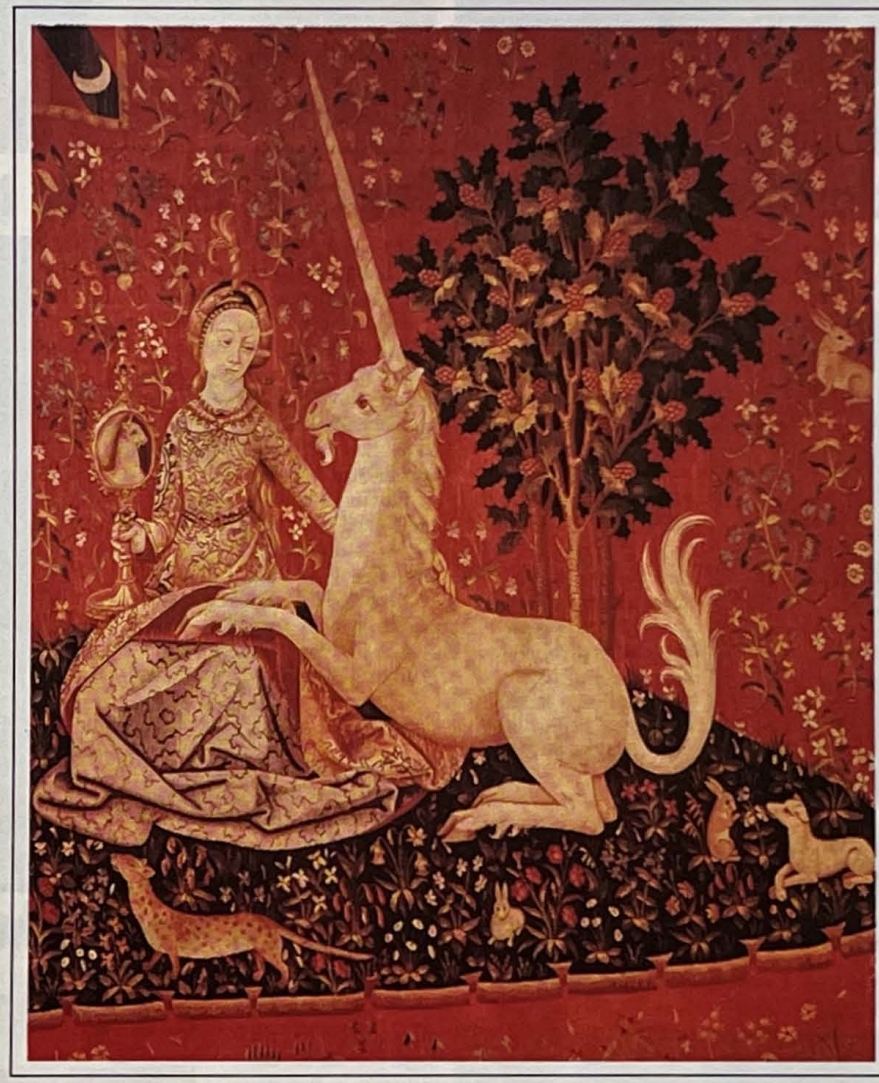

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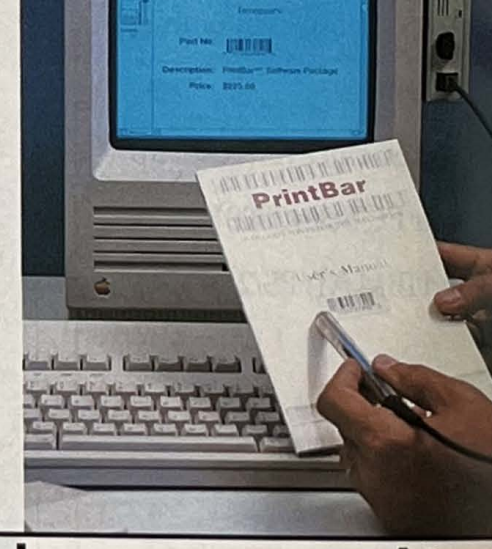

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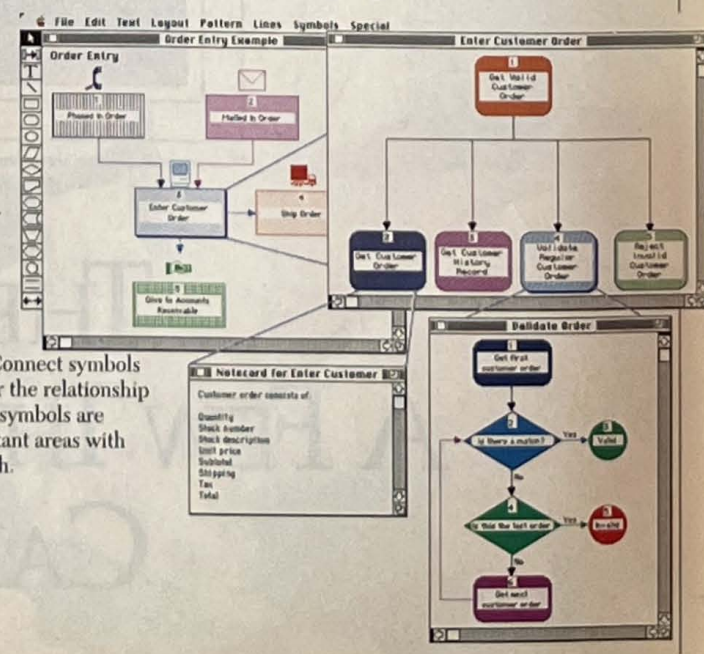

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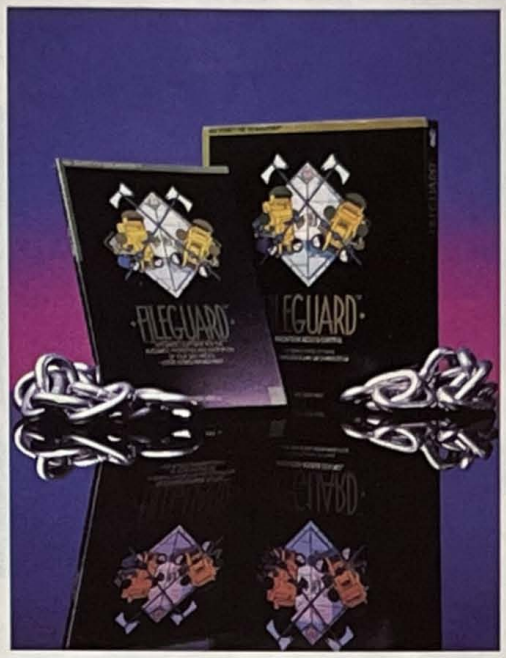

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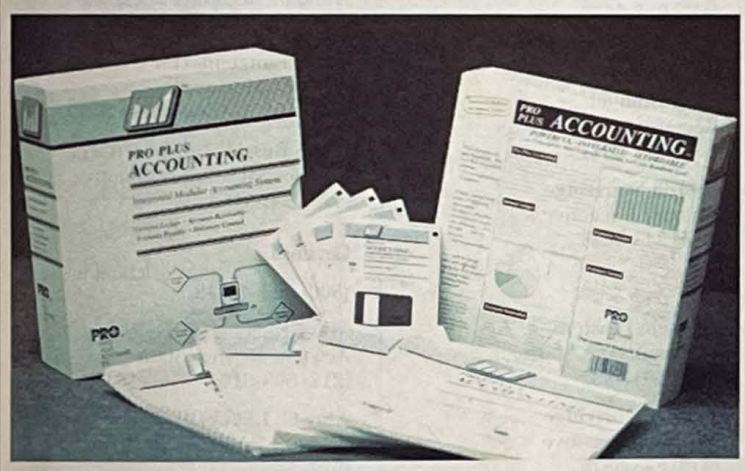

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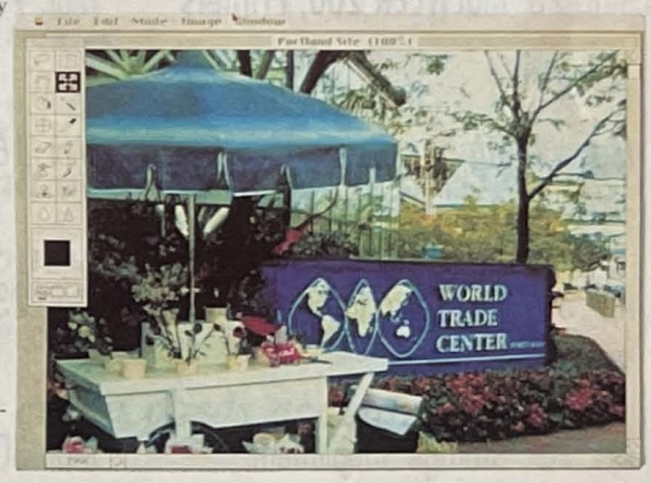

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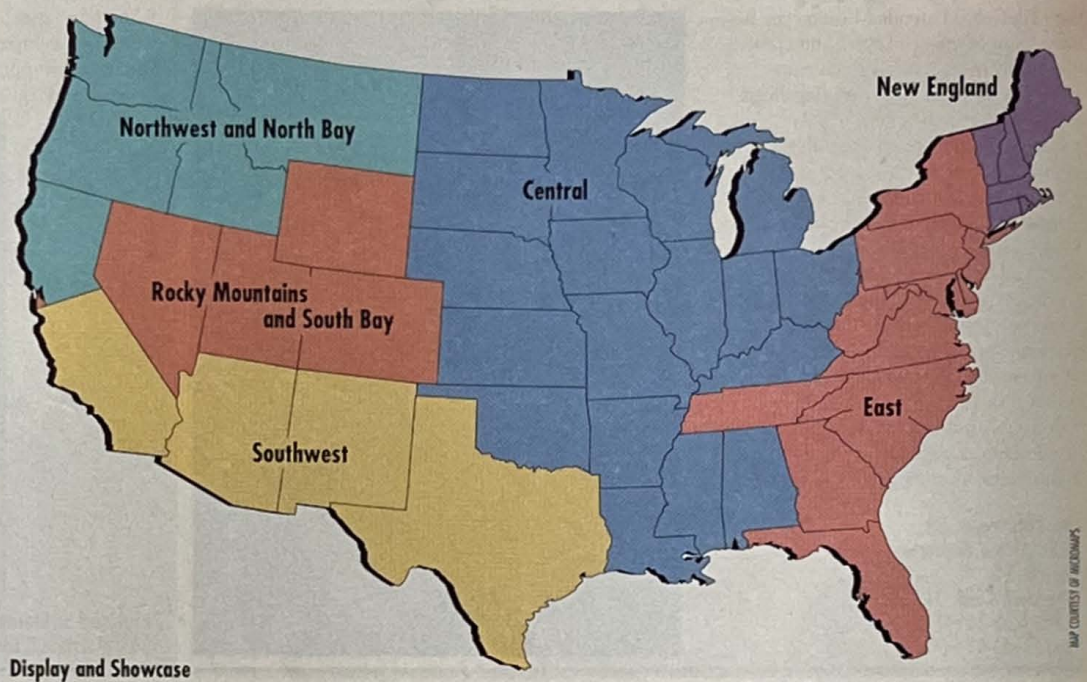

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Advertiser index

Abaton	45	CE Software	18	HJC	9	Neros	63	Silicon Graphics	30, 31
Abra MacDabra Software	62	Computer Age	58	Kaetron Software Corporation	62	NeXT	40, 41	Storage Dimensions	74
Acius	23	Computer Friends	63	Koala	46	Nikon	38	Studiotronics	35
AEC Management	47	Connectix	28	MacTel	58	Nuvotech	78	SuperMac	15, 17, 19
AGFA Compugraphics	20, 21	CoStar Corporation	62	MacWarehouse	43	Oracle	7	Technology Works	32
Aldus	4, 5	Data Translation	79	Mass Micro	10	Pro Plus Software, Inc.	63	TOPS	57
asd software, inc.	63	Dest	61	Micro D	36, 37	Radius	12, 13	Traveling Software	59
AT&T	39	Extended Systems	63	MicroFrontier	42	SAS Institute, Inc.	62	Varcon	60
Bear Rock Software Co., Inc.	62	Farallon	80	Microsoft	24, 25, 52, 53	Sharp	51	Virginia Systems	77
BFG	63	Fifth Generation	29, 76	Microtek Labs	55	Shiva	16	XA Systems	54
Braemar Corporation	62	Graphics Technology	9	NEC	48, 49	Sigma	2		

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IN THIS SECTION

65 **Memory Upgrades**
- Boards
- Disk Drives
- Simms

68 **Software**
- Business Management
- Desktop Publishing
- Education
- Financial
- General
- Graphics
- Hyperstack
- Investment

69 **Hardware**
- Bar Coding
- Cables
- General
- Peripherals

70 **Special Services**
- General
- Programming
- Toner Recharging
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Accessories

71 **CD-ROM**

71 **Connectivity**

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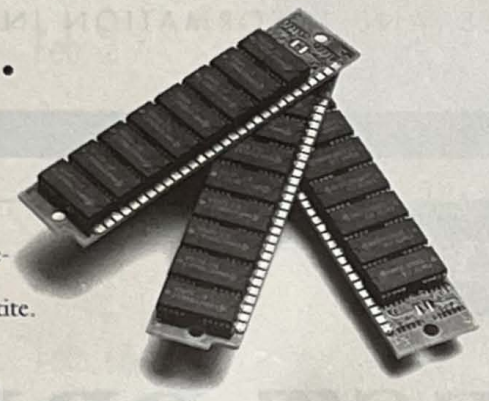

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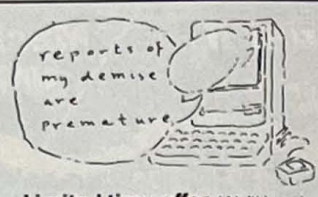

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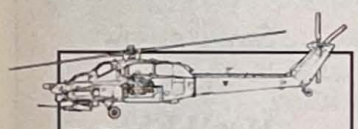

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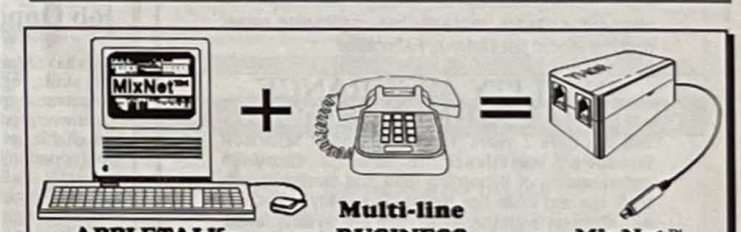

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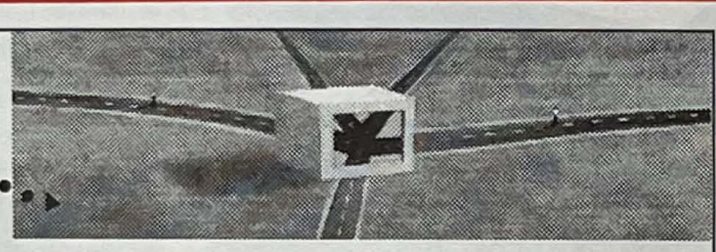

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Mac Zone CEO: Walkouts won't affect customers

By Edwin Garcia

Redmond, Wash. — Despite the departure of The Mac Zone's founder and several key employees, the mail-order reseller's CEO, Sadru Kabani, said, "The company is carrying on its business" and customers will not be affected.

Robert Wilkins, founder and executive vice president of The Mac Zone, which is based here, resigned last month along with 10 members of the company's 40-person staff, including the chief programmer and the heads of operations, customer service and order processing.

The mass departure came eight days after employees walked out temporarily in protest of the way Kabani had been running the company, according to Wilkins, who started the company in 1986. Kabani now owns a 60 percent stake in The Mac Zone, while Wilkins, his family and former head of operations, Sam Atwater, own 40 percent of the company's stock.

The earlier walkout ended after Kabani agreed to be replaced as CEO and to sell his share in the company.

But on Jan. 24, Kabani changed his mind. That day employees received a letter from him, announcing a "new Mac Zone," in which Kabani would remain president,

See Mac Zone, next page

STEVE BENBOW

AppleCentres, retail outlets that sell Apple and third-party products for the Mac, share a common "look" and offer a higher level of service than authorized dealers in the United Kingdom.

AppleCentres: Where the 'veddy' British get a Mac

By Connie Guglielmo

London — Nestled in this city's upscale Knightsbridge district — the London equivalent of Beverly Hills' Rodeo Drive — is a shop that caters exclusively to "Macophiles."

AppleCentre Knightsbridge opened in January 1986 as part of a sales and marketing experiment devised by Apple U.K. to increase consumer awareness of the Macintosh. Today, the shop is one of 51 retail outlets in the United Kingdom dedicated to the Mac. Elsewhere in Europe, 200 similar stores have been established.

"Apple had no presence in the United Kingdom four to five years ago. It was difficult to find a dealer that stocked the Macintosh, let alone one who knew how to demonstrate it," said Peter Davies, channel development manager for Apple U.K. and the man who dreamed up dedicated Apple out-

See AppleCentres, next page

The 10 commandments (to reduce viral risks)

1. Isolate computers and/or hard disks used to build a product. Use machines (possibly brand-new computers) or external hard disks that contain only the minimum software needed. Disks should be reformatted using system software received directly from the manufacturer. The Build Machine should not be connected to a file server.

2. Check all incoming software for viruses. Test with anti-viral tools all files brought into your company's development area.

3. Test all outbound software for viruses. Test all disks that leave your development area. Run a variety of anti-viral tools in your QA department; run different tools on different machines. Vary the system dates on computers that test software to catch viruses with delayed activation triggers.

4. Enhance the physical security of the "build" hardware and software. Keep product build and configuration machinery and disks under lock and key or otherwise out of the way.

5. Use virgin disks, and lock the write-protect tabs. Use master disks that have never been formatted, and format them on the isolated computer. Distribution disks should all be equipped with irreversible write-protect mechanisms, which should be locked at the factory to prevent contamination further down the distribution channel.

6. Make multiple builds, and test these against each other. Build your application on more than one isolated computer and compare the results of the two builds against each other.

7. Consider using a cross-compiler to build your software on a computer that runs machine code of a kind other than that on which the product runs.

8. Test the product using checksums. Use several checksum techniques to make sure that viruses are not introduced in the duplication process, i.e., that the copies are identical to the master disk.

9. Ensure the application of procedures to contractors and subcontractors. Make sure contractors also follow acceptable procedures.

10. Run a clean shop. Ensure that non-isolated computers in your work area are virus-free by instituting regular testing. Educate users at your company about the possibility of infection and the importance of avoiding second-hand software and software from unknown sources.

Committee issues virus guidelines

Palo Alto, Calif. — A committee that included representatives from leading software publishers last week issued a report designed to help developers minimize the risk of infection from viruses in the products they ship.

Titled "Eliminating the Shrink-Wrap Virus," the report was sponsored by the Anti-Virus Task Force of the Software Development Council of North America. The council, based here, is a confederation of seven regional trade associations with a combined membership of more than 2,000 software companies.

The committee that prepared the report, chaired by Michael Budiansky of Bear River Associates of Berkeley, Calif., included representatives of Aldus Corp., Ashton-Tate Corp., Microsoft Corp. and Symantec Corp.

The Software Development Council of North America can be reached at P.O. Box 61031, Palo Alto, Calif. 94306; (415) 854-7219.

Excerpts from the report are printed to the left.

Business BRIEFS

Apple seeks to attract software developers to Far East

Cupertino, Calif. — Apple is hoping to entice Mac software publishers into Far East markets by offering information and assistance and by "dispelling copyright myths and misconceptions" that have dissuaded developers.

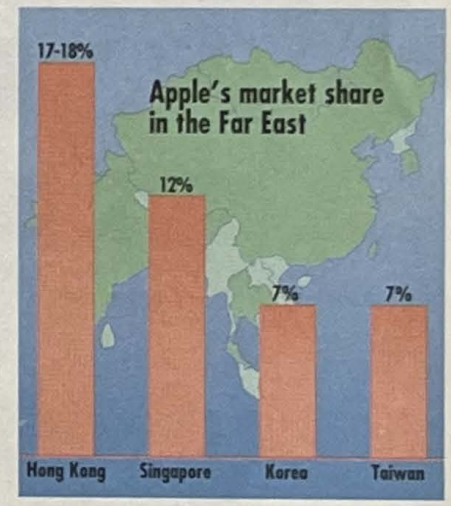
"The common perception when it comes to software is that [Far East countries] are a den of thieves and pirates. That's simply not true," said William Peter Knight, Apple's senior counsel for Asia Pacific Operations, at a company-sponsored seminar here last month.

Apple Far East, part of Asia Pacific Operations, is responsible for marketing in an area stretching from Pakistan to South Korea. It includes 15 countries, dozens of major languages, and hundreds of minor languages and dialects.

Apple's revenues for the region grew by 60 percent in fiscal year 1989, according to Bill James, general manager of Apple Far East. Hong Kong, Taiwan, Korea and Singapore — the so-called Four Tigers of newly industrialized Asia — together accounted for 70 percent to 75 percent of sales.

Apple officials said that software localization is the key to the company's prospects in the region. Today, James said, Apple has a 7 percent market share in Taiwan and Korea, in terms of revenues; 12 percent in Singapore; and 17 percent to 18 percent in Hong Kong.

"We are willing to help [third parties] with information, and if we feel the product is a winner, then certainly [we will offer] Apple facilities and resources as well," James said. To assist developers considering the market, Apple is offering a 36-page document titled "Myths & Realities of Copyright in the Asia Pacific Region."



Apple offers $1 million to say Thanks to Teachers

New York — Apple has contributed more than $1 million to help finance a national campaign to increase respect for education in the United States.

"The new Thanks to Teachers program aims to reward K-12 teachers recognized for outstanding contributions and to raise the credibility of the teaching profession," said Sandra Bateman, a spokeswoman for Apple.

The public awareness program includes a one-hour prime-time TV special depicting teachers in Deer River, Minn., as well as a series of Apple-sponsored 30-second TV spots that celebrate excellence in education.

Thanks to Teachers is accepting award nominations in 25 metropolitan areas this month. About 125 winners will receive a Mac SE/30 with 2 Mbytes of RAM, an ImageWriter II, an Apple Personal Modem and Microsoft Works.

A national award ceremony will be held on June 9 in Washington. The winning teachers will participate in a subsequent symposium on major issues in education.

Thanks to Teachers is co-sponsored by Apple, the National Foundation for the Improvement of Education, the National Alliance of Business and Group W Television.

AppleCentres

From previous page

lets. "Today, AppleCentres are where the rubber meets the road."

What distinguishes AppleCentres from other Apple authorized resellers is the level of commitment to Apple. For starters, an AppleCentre — described as a partnership between Apple and resellers — must be set up as a separate legal company by retailers, he said.

All AppleCentres also must share a "look" — encompassing everything from chairs to shelves — designed by Apple. Each is staffed by Apple-trained sales representatives and technicians who "undertake to respond to service demands within 24 hours," according to an Apple brochure describing the concept.

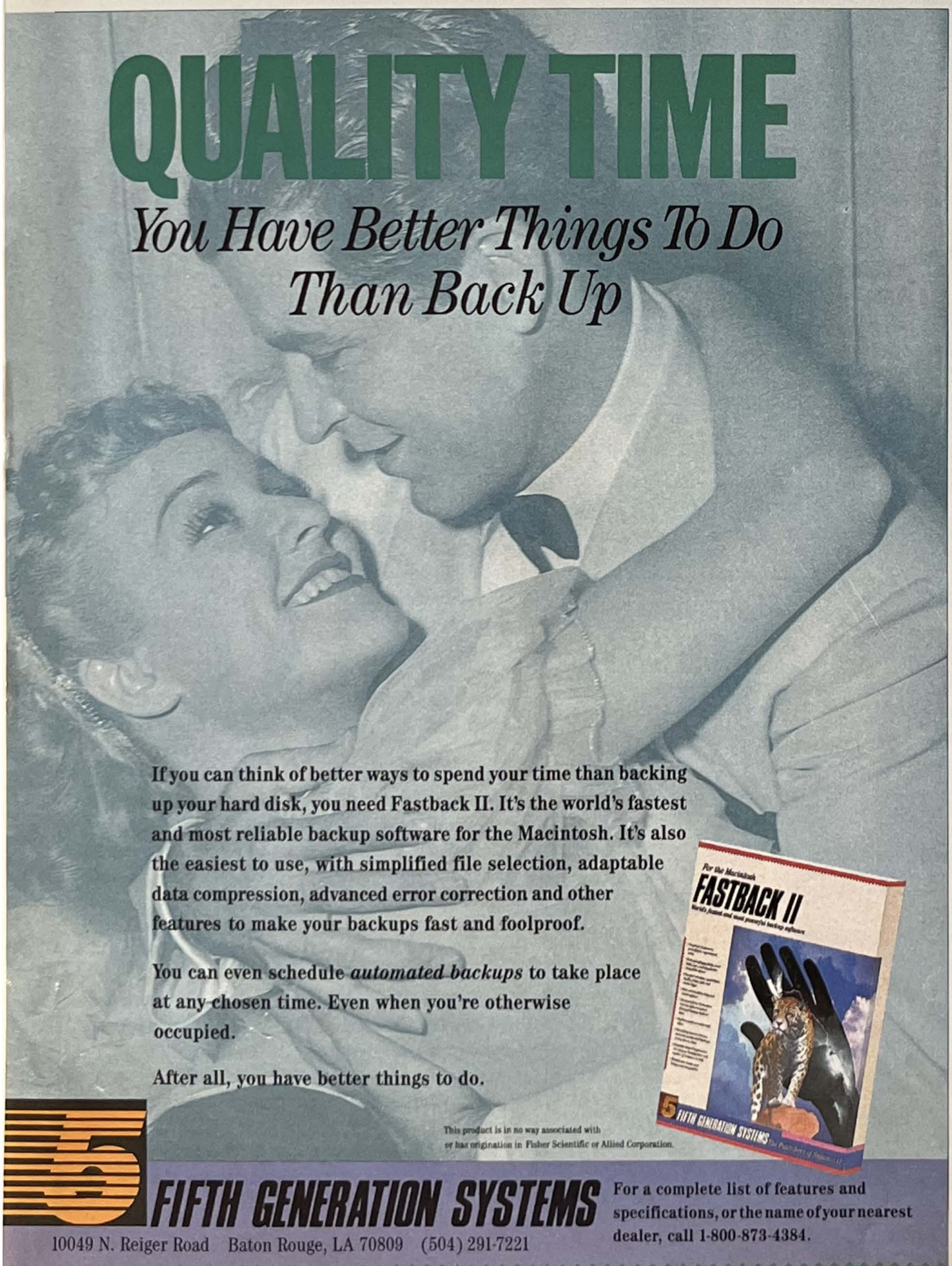
In addition, each must house a dedicated training facility. "AppleCentres offer a higher level of service and support than our authorized dealers," Davies said.

Setting up an AppleCentre costs about $320,000 to $480,000, Davies said. While Apple helped defray retailers' costs at first, the stores now are funded entirely by the resellers. But the expense has not hurt reseller interest; Apple U.K. expects to welcome 15 new AppleCentres by the end of September.

That's because the Macintosh has become increasingly popular in the U.K. corporate market, Davies said, adding that the United Kingdom is the largest growing market for the Mac in Europe. Today, more than 120,000 Macs are installed in the United Kingdom, according to a study by KPMG Peat Marwick McLintock of London.

"For our corporate customers, an AppleCentre's physical presence gives the feeling that the dealers are there to stay and will offer continued sales and support," Davies said. "And they know that AppleCentres are stamped with Apple's seal of approval."

Last week's promotion of Apple Europe President Michael Spindler to chief operating officer of the whole company has increased speculation that the AppleCentre concept may soon reach the United States. But Davies said Apple has no such plans. "The issues are different in the United States," he said. "The concept would need to be tailored to a different audience." □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Mac Zone

From previous page

CEO and majority stockholder, working with a new vice president and management team. The letter invited employees to stay if they wanted to be part of the revitalization.

Shortly thereafter, the 11 employees — including Wilkins and his wife, mother and sister and two close friends, according to Kabani — quit.

The Mac Zone was shaken earlier last month when a local newspaper revealed that Kabani pleaded guilty on Jan. 5 to a felony charge of making a false statement to a federal official in connection with an incident at the Canadian border last summer. A U.S. District Court judge in Seattle sentenced Kabani to two years of probation, a $5,000 fine and three month's residence in a halfway house for failing to declare that he was taking more than $10,000 into Canada.

According to his attorney, J. Robert Sim, Kabani was arrested after a random search of his Mercedes-Benz at the border turned up envelopes containing $1.08 million in cash in the car's spare-tire well.

Kabani, 45, first told customs officials the money belonged to a friend in Africa, according to Sim. Later, however, he said the money was the monthly collection for his Ismaili Muslim religious community and that he was taking it to Canada for transfer to a Swiss bank, according to Sim.

Kabani's letter to employees, obtained by MacWEEK, said, "A personal setback for Sadru involving religious funds has been exploited to orchestrate a takeover of the company with the threat of shutting it down."

Employees who left the company, however, said Kabani's conviction had very little, if anything, to do with their decision.

Kabani said the departure of a quarter of his personnel was not crucial to The Mac Zone. "Business is solid, management is solid, and the commitment is there," he said. "We have a pool of talented people here who are assuming capable positions. I don't believe customer service will suffer at all." □

Mass Micro exec steps down

Sunnyvale, Calif. — Thomas Massie last week left his post as executive vice president of marketing and product management at Mass Microsystems Inc., the Mac hardware developer he co-founded in 1987.

Massie, 28, could not be reached for comment. "One of his main goals was to build Mass Microsystems into a successful company and take it public," said Meredith Lyon, marketing communications manager for the Sunnyvale, Calif., company. "Now that he's done that and there's a strong management team, he decided it was time to move on."

Mass Microsystems developed the DataPak line of removable storage devices and the ColorSpace line of video boards for the Mac II.

The company went public last September, netting approximately $7.6 million from the sale of nearly 1.9 million shares. □

MarketWEEK

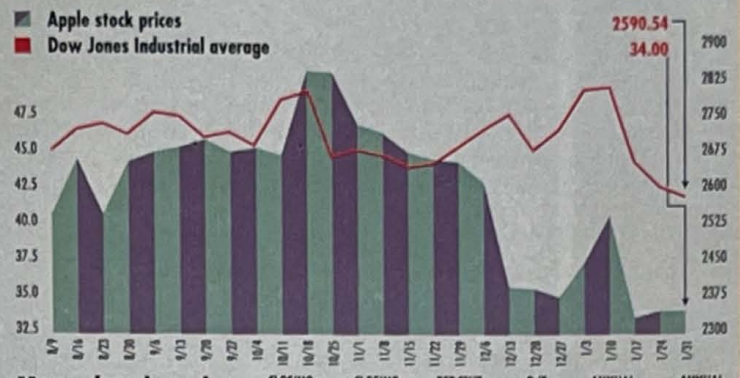
STOCKWATCH

Apple's shares take a pause; Sun's stock jumps 11.51%

Despite last week's announced work-force reductions, the price of Apple's shares remained unchanged at $34 during the week ended Jan. 31.

But that was far from the case with Sun Microsystems Inc., which flexed its muscles to achieve an 11.51 percent jump. Last week, Sun reported a higher-than-expected net income of $20.2 million for the second quarter — perhaps a sign that the company is overcoming its problems of last summer and fall. Sun gained the largest percentage points of any of the companies in MacWEEK's portfolio.

In sharp contrast, Businessland Inc., buffeted by price wars on the microcomputer retailing front, posted a net loss of $1.2 million for its fiscal second quarter. For the weekly trading session, Businessland fell 5.26 percent to finish at $6.75 a share, just 25 cents above its 52-week low of $6.50.



Mac-related stocks

	CLOSING 1/24/90	CLOSING 1/31/90	PERCENT CHANGE	P/E RATIO	ANNUAL HIGH	ANNUAL LOW
MAC-RELATED COMPANIES						
Adobe Systems Inc.	24.50	23.50	-4.08	15	30.00	14.00
Aldus Corp.	16.50	17.50	6.06	15	24.50	12.25
Apple	**34.00**	**34.00**	**0.00**	**10**	**50.38**	**31.88**
Ashton-Tate Corp.	10.75	10.00	-6.98	-19	24.00	8.75
Businessland Inc.	7.13	6.75	-5.26	12	15.25	6.50
Microsoft Corp.	90.75	92.50	1.93	25	96.00	45.75
Motorola Corp.	55.75	54.63	-2.02	14	63.63	39.50
Seagate Technology Inc.	15.75	16.25	3.17	11	16.38	9.38
3Com Corp.	11.50	11.00	-4.35	13	28.75	10.00
INDUSTRY INDICATORS						
Digital Equipment Corp.	79.75	79.13	-0.78	11	118.38	75.25
IBM Corp.	97.50	98.63	1.15	15	128.63	93.38
Sun Microsystems Inc.	17.38	19.38	11.51	44	23.00	13.00

Compiled by Nordby International Inc., Boulder Creek, Calif.

MARKETWATCH

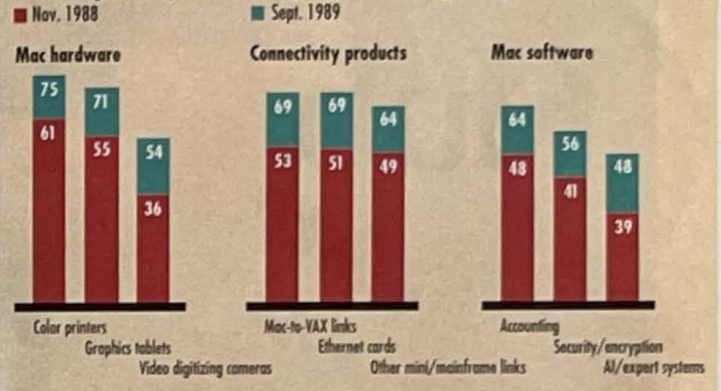
Brand awareness increases in Mac market

As the Macintosh market enters its sixth year, buyers have become more aware of the leading brands in each product category.

In purchase-plan studies conducted in November 1988 and again in September 1989, MacWEEK subscribers were asked what brands they were considering buying. Across all types of Macintosh products, the percentage of buyers who were able to list specific brands increased from 61 percent in 1988 to 67 percent in 1989.

As the examples in the graph below indicate, some of the newer product categories showed the greatest advances in brand awareness. — *By Griffin Dix*

Percentage listing brands being considered for purchase



Source: MacWEEK Purchase Plans Studies, Parallax Marketing Research (1988); The Research Spectrum (1989)

MacWEEK

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Dawn of the support decade?

Now that the dust is beginning to settle at Apple, and Spindler is making his presence felt at company headquarters, the Knife wonders if some long-rumored major changes aren't in store for the reseller channel. Box-moving dealers should watch their backs. The name of the new game is value-added.

Unless Spindler gets cold feet, hundreds of current dealers could be in real danger of losing their Apple authorization.

And just this week news arrived that Apple is exploring the brave new concept of service and support for corporate customers. Apple has instigated a pilot program at one very, very large account to furnish the kind of support that IBM and DEC have been providing for years. This lucky site enjoys a full-time on-the-scene Apple technical support person. If all goes well, there are plans to expand the pilot program to a select group of other large accounts. Just beta testing such a program is radical for Apple. Didn't someone in a position of influence at Apple once say that customer support for Apple computers was like a $2,000 Maserati: He'd like one but he isn't likely to get one. Oh yeah, that was Allan Loren.

Speaking of Loren, there were early indications of his impending execution in John Sculley's video roast of Stewart Alsop, mailed in for the gala anniversary party for P.C. Letter. In the video, Sculley belatedly joined the rest of the world in ridiculing Loren's infamous HeloCar ad campaign. (He also claimed that Apple's Microsoft lawsuit was all a mistake begun by Alsop. "You wrote Apple an open letter telling us to start wearing suits. Well, I gave it to Al Eisenstat who misread it as 'start filing suits.' ")

Apple wasn't alone in undergoing a major reorganization last week. Sources close to the action report that Claris underwent a shake-up of its own, although it was relatively bloodless by Apple's standards. Due to one departure there's an opening for a manager of text applications. Duties include responsibility for MacWrite II and a new product expected to be announced at the next Macworld Expo.

IIGS for awhile. Just because Apple has let the IIGS NuBus card (sometimes code-named Dove or Golden Gate) languish in the Cupertino storeroom for the past year or so doesn't mean that the IIGS doesn't have a rightful place in Apple's new-found religion of the low end. The Knife reports that the new IIGS System 6 will share at least some features with the Mac System 7. In addition to the ability to read Mac disks, the new version of the GS operating system will include a distributed file system similar to System 7's.

Apple also is rumored to have a surprise in store for presentation masters who have been casting lustful glances at the NeXT machine's built-in digital signal processor. Mac the Knife feels certain that a DSP NuBus card is in the works and says that Apple has targeted a fall release date. Lights, camera, presentation!

All that Jasmine. Careful observers inform the Knife that Jasmine has a couple of new products in the wings scheduled for introduction later this year. One will be a removable cartridge drive using a Bernoulli mechanism. The upcoming Jasmine CD-ROM drive, however, may create more excitement. Sources tell the Knife that Jasmine is hoping for performance twice that of Apple's unit at a retail price currently projected to be $600. The Knife warns, however, not to go snooping around the Jasmine parking lot at night. As Jasmine ambassador Scott Gaidano can attest, the joint is under video surveillance.

Mike, call home. The Knife wants to hear from A.C. "Mike" Markkula. The proud owner of 5.8 percent of Apple's gyrating stock and most-influential board member could end the speculation about what is really happening in the board room and executive offices at Apple. The Knife wonders, for example, if long-time Apple employee Debi Coleman is in the running to fill the Apple USA vacancy created by Loren's departure. How about Mike Homer as a dark horse? Or maybe it'll be Bill Coldrick, the safe choice.

Could Del Yocam stage a comeback? Meanwhile, will Gassée grow tired of the pesky press? And just who is responsible for the lack of low-end Mac products? Inquiring minds want to know.

Mike, your MacWEEK mug is waiting. □

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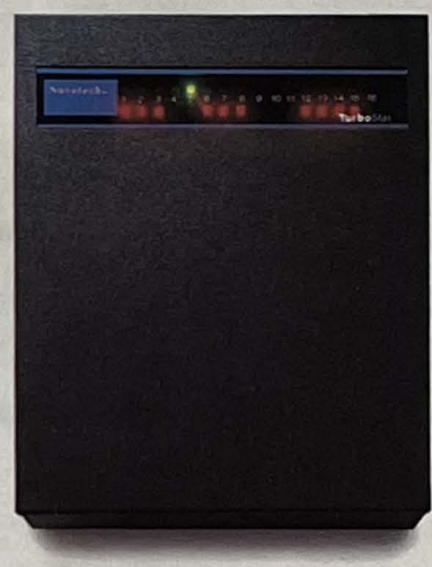
Typical Macintosh Network Hub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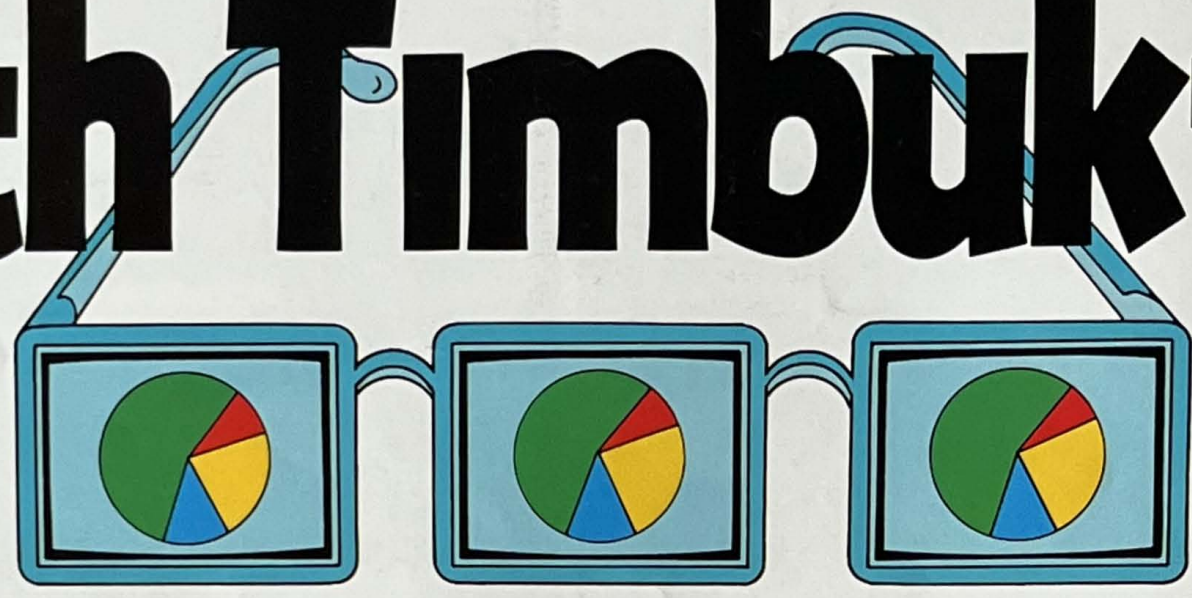

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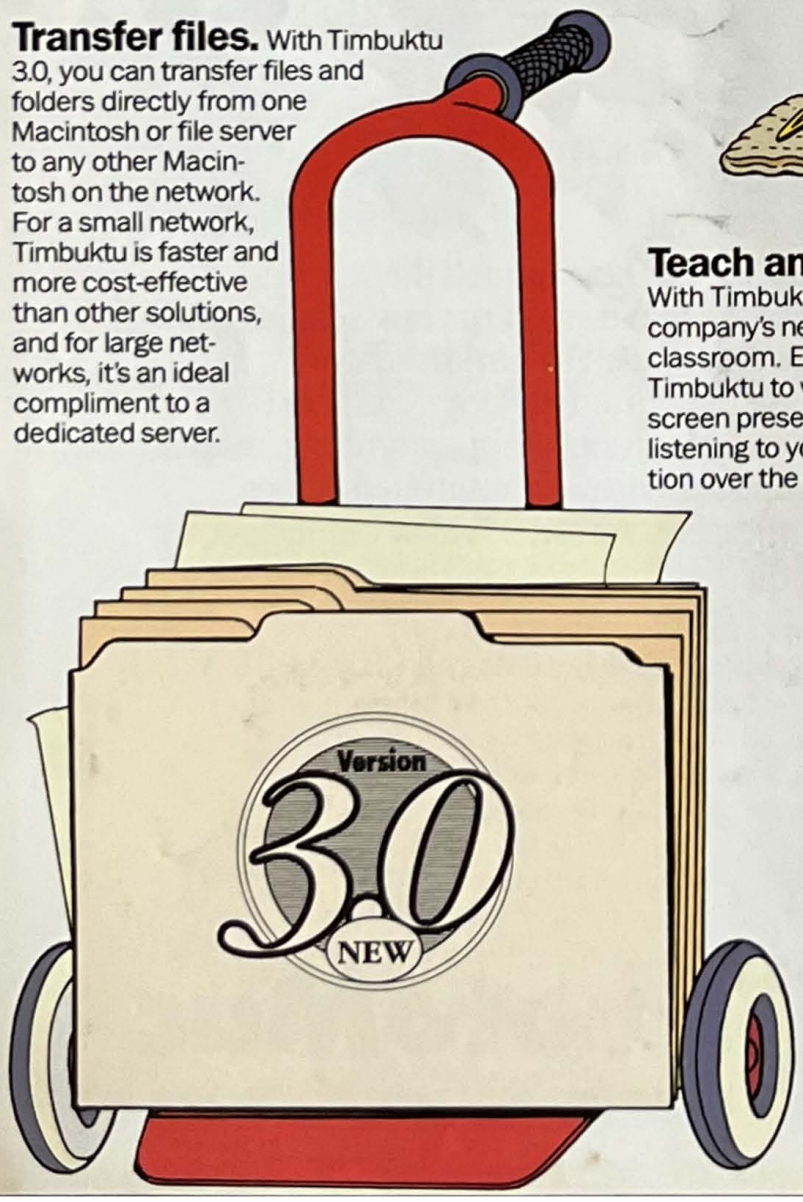

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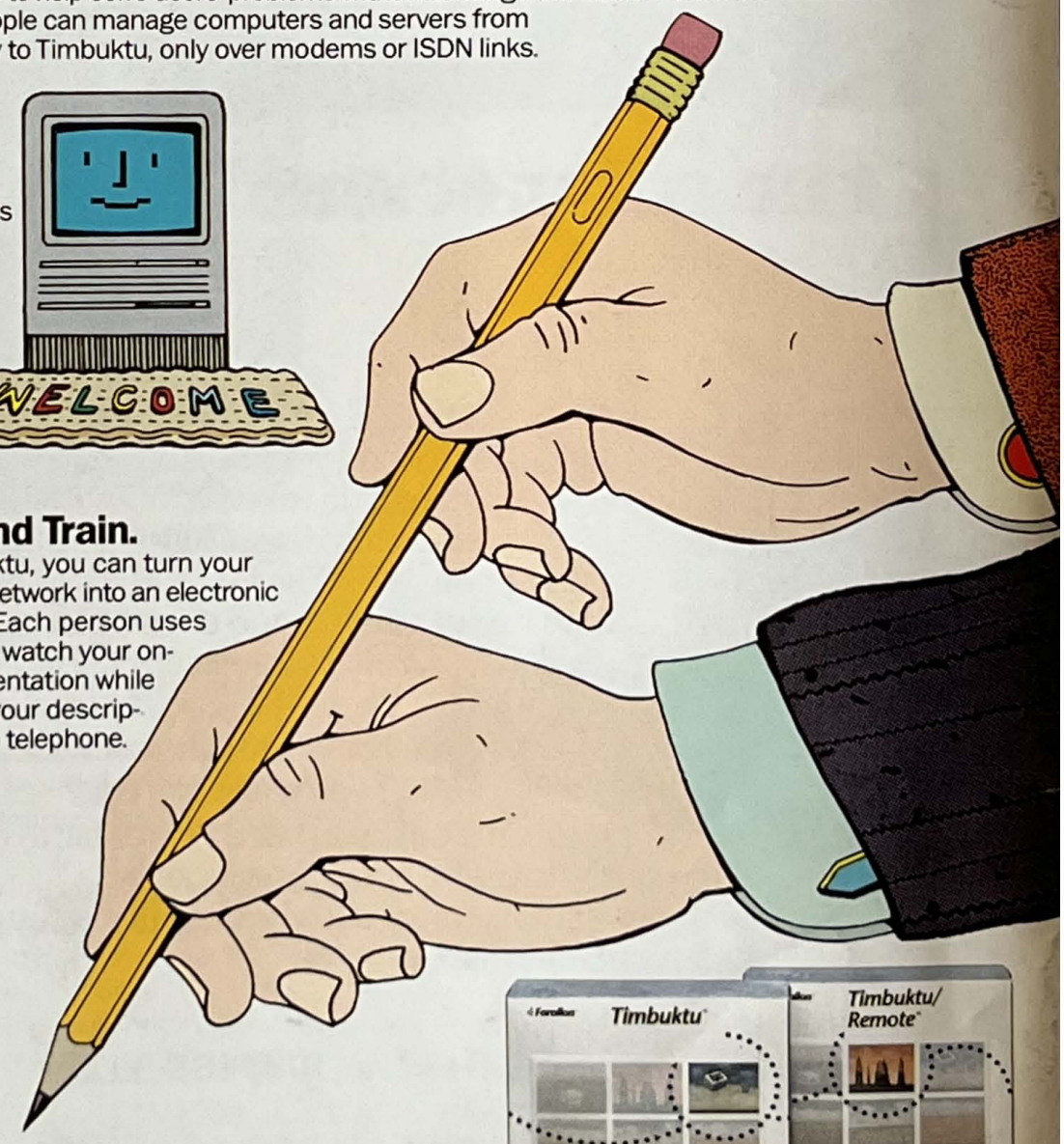

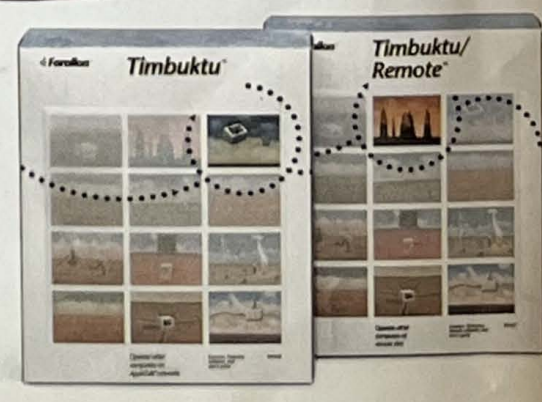

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